Tapping All Our Talent Review – EQUATE SCOTLAND RESPONSE

Section 1:

Q1 Do you believe progress has been made towards achieving gender equality in the STEM workplace in Scotland since 2012? (Yes/no).

To an extent some progress has been made, as there is increased awareness of the business/economic case for gender equality in STEM. However, this has not been translated to the same level of action or change to progress the issue across both academia and industry.

Q2 If yes, what action(s) do you believe have had the greatest impact on improving gender equality in STEM in Scotland? (List maximum of 3).

1. Positive action measures taken by employers through the support of third sector organisations such as women-only placements and outreach.
2. Company wide (and published) gender equality action plans for industry and the Athena Swan charter for universities.
3. The Scottish Funding Council's gender action plan and its associated targets

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? (List maximum of 3).

1. Progress has been stagnant within the STEM industries due to limitations in:
   a. Adequate funding/resourcing of equality and diversity work
   b. A lack of embedding gender equality responsibility and knowledge throughout organisations/companies
   c. Misconceptions, myths and a lack of understanding around positive action measures
2. Progress has been limited across the education sector due to a number of factors:
   a. A lack of gender equality competence and the reinforcing of gender stereotypes within education.
   b. A lack of coherence/consistency on STEM education across schools (it is too often dependent on the engagement and personal interest of a teacher and left for them to pursue or dependent on the resources and contacts available to a school, consequently meaning schools in affluent areas have access to better STEM engagement).

Q4 Which of the recommendations made in the 2012 Tapping All Our Talents report do you believe should be prioritised going forward? (List maximum of 3).

1. High quality, fairly paid and flexible/part-time work
2. Culture change in industry
3. High quality, affordable, flexible childcare

Q5 What further recommendations (if any) would you make to policy-makers, educators or employers to tackle gender inequality in STEM in Scotland? (List maximum of 3).

1. Gender competence and gender equality inclusion across policy making: Currently gender equality is embedded in policy where there are organisations such as Equate Scotland involved in the making of the strategy or policy or it is a directly "equalities" related area. Gender analysis needs to be applied to all policy making to ensure the direction Government

is taking is improving women's lives and not potentially further embedding gender inequality (for instance the recent manufacturing in Scotland strategy which failed to include any reference to or action on gender equality in the labour market).

2. An intersectional approach is needed across all gender equality activities in STEM. When we pursue gender equality measures we must make them viable and of impact for women of colour, working class women, LGBTI women and disabled women. This must exist in policy making, in data collection and in industry/academia's understanding and competency around gender equality.

3. Adequate and longer-term funding of initiatives to tackle gender inequality in STEM: The third sector has been working in partnership with industry and the education sector on women's equality in STEM for a number of years, however this is often impacted by short-term funding which prevents the embedding of learning and culture change. To have any real impact, funding of projects, such as women returners, must be more than one year and must have support to become sustainable.

4. Data collection in STEM and in gender equality across Scotland is poor. Often the data we need to analyse the extent of progress in this area does not exist or is not an accurate representation of Scotland. Investment must be made in intersectional and disaggregated data collection of the labour market (who is working in STEM and at what level) and improvements in data collection in academia is required; intersectional and disaggregated data of recruitment, retention and employment destination by subject.

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.

1. Further and higher education seem to have learnt the most from the previous report and have taken on a number of initiatives on gender equality in STEM. Universities and colleges have been the boldest in their use of positive action measures in comparison to industry. Examples of women-only courses in engineering, technology and STEM introductory courses have been introduced in City of Glasgow College, Ayrshire College and West Lothian College.

2. Flexibility in the workplace has gained significant traction. More employers than ever are trying to move away from presenteeism and develop flexible cultures for all. Particular examples in STEM can be found in FanDuel and CompanyNet.

3. At Equate Scotland we have delivered women-only placements through our CareerWise programme and women returners since 2013 – employers who have participated in these specific programmes have seen significant benefits, however these placement must be adopted by the majority of STEM for this to have the impact we need.

4. The number of employers working with us to be trained in gender equality and equality and diversity more widely has significantly increased since this report was launched. Unconscious bias is still the most commonly requested training, however, we must ensure that this training is delivered in a high quality manner which includes in it what actions employers will take and ensures that those in the room take responsibility for their biases. Whilst the lesson to participate unconscious bias training has been learnt, what has not been learnt is that the training is not in of itself the end goal – culture change and elimination of biases are the end goals.

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?

1. With economic uncertainty (compounded by Brexit) many employers are (further) decreasing their investment in gender equality measures (for instance many employers tell us that they cannot provide paid women-only placements due to budget restraints, recruitment freezes and uncertainty).

2. A shortage of skills and ongoing vacancies particularly in the technology and engineering sectors, cause both a negative and positive effect on gender inequality in STEM. Some employers have seen this as an opportunity to pursue outreach to women and increase their needed talent pool. These employers have acknowledged that such initiatives require a longer-term plan and will have a positive impact further down the line. However, for others, their skills need has been immediate and this has meant that they are continuing or even increasing their use of the status quo; recruiting and promoting skills from the same male dominated talent pools with no long term plan acknowledging the need to attract more women to increase the availability of skills.

3. Gender pay gap reporting has had a *somewhat* positive effect on highlighting occupational segregation across the labour market and has pushed employers to publish their data, unsurprisingly the gender pay gaps are significant in the STEM sectors. However, whilst it is a legal requirement to publish the pay gap there is no such requirement to develop, publish and pursue an action plan on how companies will tackle their gender pay gaps – this is an opportunity missed and has limited what could have been a more positive policy influence on gender inequality in STEM.

Q8 To what extent to 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?

It is clear that gender inequality in STEM is an economic priority of the Scottish Government. It is also clear that this message has filtered across academia (particularly with the Scottish Funding Council's gender action plan) and to a slightly lesser extent across industry. There is no shortage of rhetoric around gender inequality in STEM from early years through to leadership and company boards. However, rhetoric is being met with action only under two conditions; firstly, where there are individuals who have a personal interest and enthusiasm for the cause or where there are legal or financial measures which demand change (such as pay gap reporting or legislation on equal gender representation on public boards). In the main, whilst messages and narratives are in favour of gender equality, there are only a limited number of embedded, evaluated and successful actions which can be pointed to, particularly in industry.

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?

Gender stereotyping must be challenged and tackled at an early stage. This can be achieved through ensuring gender equality awareness and competency is built in (through experts in this area) the training of early years practitioners, teachers and careers advisers. Partnerships

between teachers/schools and industry experts should be encouraged. As teachers report low levels of confidence in STEM and associated careers and the pace of change in these sector is considerable, such partnerships would facilitate knowledge exchange and potentially overcome this barrier.

Finally, we need to move away from single interventions in schools from industry and instead pursue sustained relationships and partnerships which follow pupils across their education journey. For example, a single intervention with a woman role model in engineering at age 8 will not tackle gender stereotypes which are deeply embedded. Interventions are needed multiple times from early years through to early secondary school (when subjects are chosen) to enable any challenging of negative perceptions of STEM.

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?

1. As above women-only entry courses to STEM subjects as a means to engage women and retain them to these subjects is a tried and proven intervention.
2. Gender equality needs to be considered when developing the curriculum; where women are invisible across STEM, more effort is needed to make them visible, for instance ensuring women experts in the field are used in reading lists.
3. Those teaching STEM in universities and colleges should have a level of gender awareness in order to not reinforce stereotypes in their teaching and to ensure that the limited number of women in their classrooms are heard and equally engaged.
4. Whilst the Athena Swan charter has taken universities a considerable way forward, universities and colleges too often work in siloes – where there is an excellent and gender aware department in an institution there is also another in the same institution making no progress. Universities and colleges need to better communicate internally and ensure that all staff are taking responsibility and engaging in gender equality, rather than it being left to Athena Swan staff or specifically equality and inclusion staff.

Cultural Change

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

Equality and diversity needs to become the responsibility of all, not simply of someone in HR. Training and knowledge building needs to be part of inductions and regularly reviewed. Organisations need to create holistic strategies which are made public and which set targets and deadlines, furthermore, these strategies need to ask something of everyone in an organisation and be part of appraisals and promotions to embed the importance of equality and diversity. Industry needs to embrace bold positive action measures to tackle occupational segregation, too few are currently pursuing these, and they remain unclear on the legality around positive action, often confusing it with positive discrimination.

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?

Efforts to change attitudes and culture need to be long term, well-resourced and embedded into institutions. Whilst we embed counter measures such as gender equality in classrooms and

developing better cultures in workplaces (as we should), attention also needs to be paid to tackling the gender stereotyping messages received by children and young people through media, toys and people who act as influencers around them. Approaches to changing attitudes

need to be inclusive and need to reach people/communities where they are (for example embedding interventions within communities rather than expecting disengaged/marginalised communities to come to science centres or a university campus to engage in a "girls into STEM" event. Often efforts in this area, tend to preach to the converted; those who have the resources to attend events, those who are on social media or those who have access to high level education opportunities or industry contacts. Attitudinal change across Scotland can only happen when all of Scotland is invited and able to participate.

Methods of accountability and reporting are necessary to assess whether public and private organisations are taking gender equality seriously and if they are creating inclusive cultures where women can flourish. Improvements in reporting and a more robust assessment through public sector equality duty can play a role in evaluating whether public bodies are contributing to changing culture and allow them to be held to account. A private sector equivalent does not exist, however mechanisms of reporting and accountability on whether community benefits clauses or corporate social responsibility initiatives are improving gender inequality and having any real impact, could be a way to challenge industry and pursue real culture change.

Q13 How do you suggest culture change can be measured in a meaningful way?

To enable us to analyse whether progress is being made, we need better data (as mentioned above) to provide a benchmark. From that point annual data review on women taking subjects, women graduating from STEM subjects and women working/being decision makers in STEM will provide a picture of progress. Secondly, data collected from women working in and studying STEM about their experiences and their likelihood of remaining in the sector, again, collected on an annual basis, will also provide us with a qualitative view from those we are seeking equality for.