

Section 1: In brief

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

YES

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).

Targets for more women in senior positions (i.e. professor)

Commitments of funders to take away restrictions (i.e. fellowship access) which affect women disproportionately and to threaten not to fund when gender inequality persists (although not enough of this – they could do more)

Focused initiatives from professional bodies on particular issues (i.e. IOP focusing on primary teachers). This issue is messy and complex, so it can be more effective to hone in on one problem and find solutions in isolation. Trying to do everything at once can sometimes mean we do nothing.

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).

Attitudes to part-time work

Attitudes to/of men taking parental leave

Punishment/repercussions for units (Unis, Schools, Individuals) who don't do anything to tackle this

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).

Review of ATHENA SWAN which has become bureaucratic and a burden for minorities (who generally manage it without fair recognition and reward)

More determination from funders to push change by putting their money where progress is.
More measures against institutions that don't show positive direction of travel

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).

I think we need to help people to change – really clear advice about how to make things better and what works. Not leaving people to reinvent the wheel and get bogged down pointlessly when expertise exists in the heads of other people/institutions who have worked out good ways to tackle things. Funding for secondments where people are put into departments where they can help change happen. These would be HIGH status and career boosting.

Properly costed frameworks of what it takes to tackle this – looking at the best places (Chemistry @ Edinburgh?) and working out what it cost to shift culture, then making funding available in the short term to do this?

Attitudes to Juno (IOP) seem more favourable than towards Athena SWAN. Could we fund some pilots in Scotland for similar departments and see if that approach is more effective for bringing about culture change without breaking the careers of the academics who manage it?

Section 2: In detail Women in STEM in Scotland 2018

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.

I think there are signs of recognition that a better, fairer work culture benefits everyone. Not sure it is good practice but can see a shift in attitude towards ensuring recruitment is actively managed to improve gender balance from “this is pointless and annoying – we just want the best people” to “how do we attract a wide range of applicants because we know that’s a good thing to have”.

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?

Money – don’t give research money to units (institutional, school, individual) who don’t show signs of tackling this. Not about pure results (not likely to get 50/50 in Engineering any time soon), but need to present evidence that they’ve tried to recruit and support a more diverse population in ways that are relevant and engaging to minorities.

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?

This is where I’ve seen greatest shift – this is not just talked about by minorities now – concrete example – an away day for a STEM academic department recently where Equality was a standing theme all day and kept being raised (in a room in which women were a minority) by men rather than women as a problem that we really needed to find solutions to. There was also a recognition that scientists may not have the solutions and a call to work with social scientists to more effectively diagnose and then develop solutions for the problems.

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?

In two minds about this. Should we be enticing women into a system which discriminates against them? Shouldn’t the effort be focused on making it better and then the flow will come. But, assuming we do both at once, proper status and reward for science teachers so better people go into teaching – they have HUGE influence – so more young women are likely to want to continue. Will be interesting to see the impact of the new qualifications (Nat 5s) on the numbers going to Higher level and beyond.

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?

I’m not sure we know. We need good data and analysis to find links between activity and culture shift.

I could hypothesise that things that make a big difference to people are resource intensive. A focus on better supervision and more support might have a positive effect (we need the data to back this up, provided by people who know what data is meaningful) but will create a huge resource issue. It feels that the erosion of staff time because of additional burdens and expectations is affecting student support, which may disproportionately impact on minorities – but this is anecdotal. The good practice I have in mind is the Ingenious Women programme at Edinburgh which is now running across Scotland thanks to Scottish Government Can Do funding, managed by SFC. We evaluate this but don’t have the tools/skills to draw out complex cause and effect data – funding this would be helpful.

Cultural Change

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

I don't have enough insight or experience to comment on this. Hopefully they offer more flexible ways of making a contribution to their organisations.

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?

High quality, part-time work

Proper measures taken against people who manage badly and discriminate.

Making the money flow where this is working and stopping or limiting the flow where it isn't

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

I don't think we know. We're scientists. We should be asking people who are experts in culture – i.e. social scientists to work with us so they understand our environment and work out what meaningful measure might look like.