The Improving Gender Balance Scotland (IGBS) pilot project worked to support schools and early learning and childcare centres (ELCs) to establish interventions to effect long-term cultural change with regard to gender stereotypes, unconscious bias and inequity. Whole school/setting approaches were found to be most effective. This guide summarises the delivery model, key activity and reported impact.

The pilot was an innovative partnership between Skills Development Scotland, the Institute of Physics and Education Scotland. It ran for three years from April 2015 to March 2018.

As set out in the Scottish Government STEM Education and Training Strategy[1], there is an ambition to roll out the learning from the pilot project to every school in Scotland by 2022.

Education Scotland will lead this next phase, supported by a dedicated team. This work will continue to focus strongly on the promotion of gender balance but will also be extended and deepened to include other equality issues as appropriate.

[1] https://beta.gov.scot/publications/science-technology-engineering-mathematics-education-training-strategy-scotland
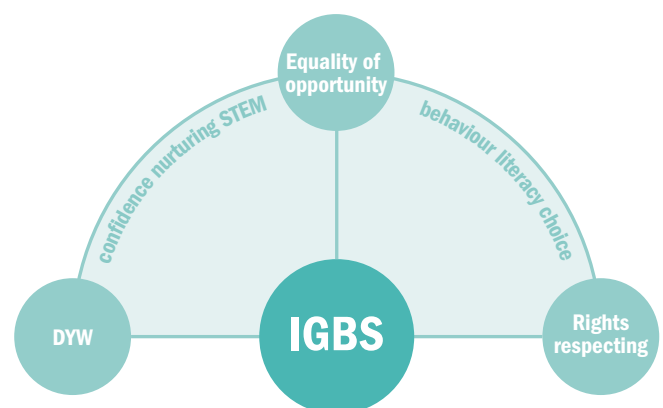
A. Why improve gender balance?

Gender stereotyping and unconscious bias lead to inherent barriers for our young people. "Too many young people continue to make choices that conform to gender stereotypes, which in turn limit their longer-term career opportunities."[2]

IGBS worked in partnership with schools and ELCs to identify and address the underlying causes of gender imbalances in participation and attainment at every stage for ages 3–18 years. Research strongly suggests that there is no inherent difference between girls and boys that should limit their interests, capabilities or ambitions[3]. And yet, we have come to expect and accept the persistent gendering of school subject choice and therefore of post-school opportunities.

Gender stereotypes are pervasive in our culture. The self-identities that young people form can be influenced by these stereotypes: they shape the assumptions that learners make about their own interests and abilities. Stereotypes also underpin the unconscious biases that we all hold. These unconscious biases in turn influence interactions with, expectations of, and advice given to young people.

Gender imbalance needs to be addressed by a wide range of partners and every sector has a role to play.

Equality of opportunity — confidence nurturing STEM — behaviour literacy choice — **IGBS** — DYW — Rights respecting

5%
Only **5% of Engineering Modern Apprenticeships in Scotland** were filled by women in 2016[4].

4%
Only **4% of the staff in Scottish early learning and childcare settings** are male[5].

[2] *Education Working For All! Commission for Developing Scotland's Young Workforce Final Report* www.gov.scot/resource/0045/00451746.pdf
[3] OECD (2015), *The ABC of Gender Equality in Education: Aptitude, Behaviour, Confidence*, PISA, OECD Publishing, www.oecd.org/pisa/keyfindings/pisa-2012-results-gender-eng.pdf
[4] www.skillsdevelopmentscotland.co.uk/media/43282/modern-apprenticeship-statistics-quarter-4-2016-17.pdf
[5] www.sfc.ac.uk/access-inclusion/access-priorities/gender/gender-case-study-men-childcare.aspx

B. Why did the schools/ELCs get involved?

Given the pressures and competing demands on centres, why did schools/ELCs agree to participate, and how did they fit it in?

Why schools took part

Reasons given by respondents:

- Supported their focus on **STEM (Science, Technology, Engineering and Mathematics)**.
- Addressing gender stereotyping as part of the **Developing Young Workforce (DYW)** agenda.
- Promoting **inclusion and equality** more broadly.
- To raise **aspirations**, particularly among females and within equality groups such as gypsy travellers or in deprived areas.
- Fitted well and contributed to supporting young people around **LGBT**.

Feedback highlighted that schools had a range of reasons. Schools had already established their development priorities for the year, but found that IGBS was inherently aligned to many of those objectives.

This meant that the programme slotted in naturally with existing plans and priorities rather than being viewed as an extra demand.

Centres approached the partnership in different ways. There was no single toolkit. The project officers worked flexibly with the schools/ELCs to plan appropriate first steps for the particular context. IGBS was weaved into a range of school/ELC strategies and programmes of activity.

"Fitted in with where we are going, was flexible and tailored, linked to and aligned with the curriculum." (primary school)

At a national level, there was a risk of the project sitting in isolation from the rapid changes that were about to take place in Scottish education. It was important to site IGBS within these key national developments rather than as an extra.

C. How was the programme delivered?

Changing culture requires a whole school/ELC approach and ongoing effort.

IGBS worked with school clusters (a secondary school and its associated primary schools and ELCs) to ensure both coherency across stages and long-term sustainability.
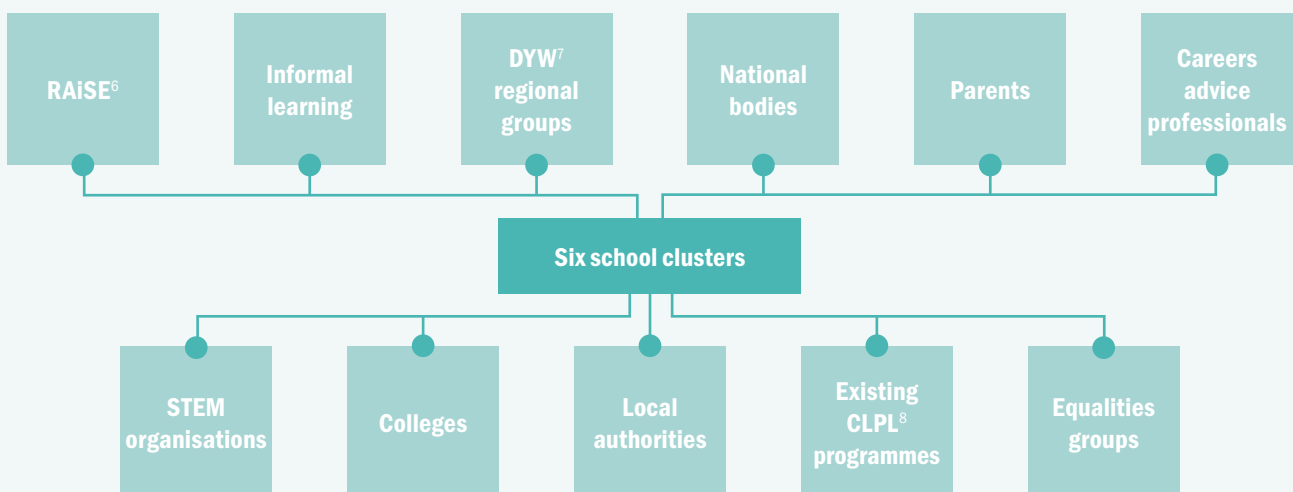
The pilot started with a focus on six school clusters. In every cluster, the secondary school was involved, and all or some of the primaries (the biggest cluster involved has nine primaries) and some ELCs.

As the project evolved over the three years, the team increasingly engaged with a wide range of other bodies and influencers, as illustrated below.

Respondents appreciated the school cluster approach adopted by the programme. Addressing gender stereotypes at an early stage and keeping this message consistent was viewed as a priority. The different sectors were keen to work together.

"I loved sharing with colleagues from secondary and nursery establishments – we could see the bigger picture that we were contributing to." (primary school)

All schools consulted were engaged in the project at the senior level. Leadership from head teachers (HT), deputy head teachers (DHT) and faculty heads (FH) was seen as essential in driving the agenda.

RAiSE[6] | Informal learning | DYW[7] regional groups | National bodies | Parents | Careers advice professionals

Six school clusters

STEM organisations | Colleges | Local authorities | Existing CLPL[8] programmes | Equalities groups

[6]*Raising Aspirations in Science Education* www.thewoodfoundation.org.uk/developing-young-people-in-scotland/raise/
[7]*Developing the Young Workforce* www.employabilityinscotland.com/developing-young-workforce/
[8] Career-long professional learning

D. What was the focus of the activity?

The project officers worked with the clusters to raise awareness of the prevalence and impact of gender stereotyping, delivered training on unconscious bias (with a specific focus on the potential impacts in ELCs/schools) and offered support in devising and implementing actions.

Responses indicated that schools really valued the project officers' knowledge and background experience of schools; how they work in practice and the challenges that they face. It was highlighted that working with schools requires a lot of flexibility and this was a key strength of the project's way of working.

It was important in planning the project to focus on sustainable, lasting change. There was also a recognition that culture change will not happen after one intervention. It was helpful that there were generally ongoing opportunities for informal conversations.

"We will have moved on as a school and will be analysing and addressing these things ourselves."
(DHT, secondary school)

"Challenged our existing perceptions – made us critically evaluate ourselves." (nursery teacher)

"The outside perspective protects our relationship with staff." (secondary school)

How did respondents feel about the support offered?

98%
feel more informed about gender balance

98%
found the **engagement useful**

95%
feel likely to **pass on learning to colleagues** and partners

91%
feel more likely to **seek out further training** in this area

Rated 6–10 on a scale of 1–10, where 10 is totally agree and 1 is totally disagree.

Find case studies at **www.bit.ly/IGBcasestudies**

E. What was the impact on practitioners?

What impact did respondents feel IGBS had on their practice?

Comments indicate an increased awareness of gender stereotypes and unconscious bias, and a wide range of specific, tangible impacts on practitioners' practice including interactions, language, curriculum, teaching approaches and resources.

"Revamped all of our policies around DYW and gender – looked at this area within career pathways – it has taken off big time." (primary school)

"All staff involved are now thinking about their teaching methods and materials and considering how they should be adapted." (primary school)

95%
of respondents have more confidence in their ability to tackle gender imbalance issues

Aggregate of a lot or a little more confidence.

"Allowed me to have more meaningful and informed conversations with young people around this issue in group and one-to-one sessions." (careers advisor)

F. What was the perceived impact on young people?
Practitioners perceived a range of positive impacts on the young people that they work with.

debate choices
confident **raised aspirations**
fairness **knowledge**
culture resilience
career pathways **inclusiveness**
mental health
challenge

There was a perceived **increase in learners' knowledge and confidence to challenge and debate around gender stereotypes**. Many respondents reported that they themselves had been (respectfully) challenged by their own learners on their own language and approaches. Young people have also demonstrated a willingness to challenge stereotypes in the media and on social media. Teachers were impressed by learners' knowledge and understanding of stereotypes, career aspirations and "fairness" and by their enthusiasm. This included both primary and secondary schools. Respondents expressed that hope that in the long term that this will impact on things like body image, strength of character and resilience.

Several schools felt that steps towards **a change in the culture of the school** have been made with more emphasis on inclusiveness and fairness. Several respondents reported that the actions have helped create an environment and culture in the schools that enable young people to feel more confident in themselves, who they are, their interests and hobbies, regardless of gender. They talked about the positive impact that this had on mental health, particularly of LGBT young people.

There were perceptions of raised aspirations, especially in relation to females and STEM, and in relation to equality groups such as gypsy/travellers and young people from deprived areas.

Some of the schools (both primary and secondary) have started to observe **shifts in perceptions of and choices around subjects and career pathways**. School representatives also talked about their girls' increased interest and enthusiasm for STEM challenges, competitions, work placements and science clubs.

"Pupils' council are all fired up about it." (secondary school)

"We see girls from more deprived backgrounds raising their aspirations – things are changing gradually." (primary school)

G. What are the challenges?
The response and feedback has been overwhelmingly positive, but respondents did highlight some key challenges to be considered in the next stages.

- **Scale of cultural change necessary:** This was seen as the main challenge.

- **Resistance/denial:** Schools reported that colleagues and parents were generally supportive but a few remained to be convinced. Some work was needed to help some colleagues recognise unconscious bias inherent in the schools.

- **Parental engagement:** Some schools felt that they could do more around parental engagement on this issue, with some plans in place for doing this going forward.

- **Balance male/female:** A small number of schools admitted that the balance of activity had been more towards females and that a challenge for them was to do more for the under-representation of males. Several secondary schools would also like to roll out gender-balance approaches more widely across different curriculum areas.

- **Long-term impact:** A further challenge reported was the difficulty in demonstrating and evidencing long-term impact of the project and activities. Schools themselves could recognise the difference, there were pockets of anecdotal evidence, but evidence of tangible long-term impact is challenging. Schools were optimistic that evidence of change will likely emerge in the long term but it will be difficult to disentangle the attribution to IGBS as there are so many other external influences.

80%
Boys account for **80% of school exclusions** in Scotland[9].

"Can't solve this in a year, it is about what can we change – what can we chip away at." (secondary school)

[9] www.gov.scot/Topics/Statistics/Browse/School-Education/exclusiondatasets/exclusionsdataset2017

For further reading and resources visit **www.bit.ly/NIHIGB**.

Evaluation methodology
Skills Development Scotland gathered data through two routes. Five focus groups of practitioners and senior leaders from the pilot clusters were convened to explore the intensive engagement in depth. In addition, an online survey captured feedback from a broader range of project beneficiaries. The full report can be found at **www.bit.ly/SDSIGBreport**.