Setting up a Network to Support Women in STEM

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Setting up a Network to Support Women in STEM
A formal network offers an effective means of empowering women in STEM, boosting their confidence and self-esteem and providing assistance in their career development. Many businesses, professional bodies and universities have set up networks for women in STEM to meet the professional development and support needs of their female employees and members.

In addition, sectoral groups such as Women in Nuclear and Women in Rail have grown up to support the female talent in those sectors and to promote the careers that are on offer to girls and young women. There are also groups with more targeted objectives such as the WISE STEM Champions looking to connect individuals from within the SME community.

Within many major employers, networks are still a popular way to engage, retain and develop female staff whilst also advancing the diversity and inclusion agenda within the business. However, times are changing, and so called Women’s Networks need to evolve to make them relevant and impactful for the future. They must aim to be an inclusive network to help promote gender parity and to create a better balanced workplace that is a great place to work for all employees.

This guide draws from best practice, and our practical experience at WISE, to pass on useful information about how to establish a network and help your network make maximum impact. If you would like to learn more about setting up a new network, or would like some tips on how to improve your existing activities, read on!
Women are still under-represented in the majority of STEM-related workplaces, both in academia and industry. This under-representation and the traditionally male-dominated culture of these workplaces means that there are particular issues which disproportionately affect women working in these sectors and create barriers to their progression.

Examples of these include:

- Isolation – lack of female peers and work colleagues;
- Exclusion from informal out-of-hours networking amongst colleagues;
- Lack of part-time and flexible working, particularly at senior level, to allow women with caring and family responsibilities to remain in work and progress their careers;
- Lack of female role models at senior and management level, discouraging women from believing career progression is possible;
- A culture which associates loyalty and value with long hours and leadership qualities with traditional male behaviour; and
- Expectation for women to over-perform to prove their worth alongside male colleagues.

Formal networks can help women to deal with these issues, providing support and encouragement to help them invest in their personal and career development. They can help to combat some of the barriers by providing a platform for discussion, for sharing ideas and understanding different perspectives, providing opportunities that may not otherwise have been available to women. Just knowing that other people have the same experiences or concerns can act as a catalyst in boosting confidence and causing change.

They enable women to meet positive role models and network within and outside their organisation, often building long-term relationships and opening up new business opportunities.

Networks can challenge the invisible structures and intangible barriers that hold women back at work by pulling together a critical mass of women within a company, industry, university, professional institute, region or nation which can have a positive influence on culture, policy and practice. They raise awareness about women’s unmet needs that may not otherwise be addressed.

By using networks to boost their confidence and self-esteem and support their professional development, women ultimately gain advantages not only for themselves but also for their organisation.

Finally, and not to be under-estimated, they are an opportunity to engage with male allies and senior sponsors who can help change the attitudes, aspirations and culture of the organisation to create a better balanced workforce for the future.

Women’s networks are permitted under current legislation as a form of positive action, defined as the deliberate introduction of a measure to eliminate or reduce discrimination or its effects. Positive action is not about special treatment for any one group, but is a means of ensuring that everyone has genuine access to the same opportunities, taking into account the impact of past discrimination and disadvantage.

See page 16 for more detail of Positive Action and further reference.
This kind of positive action is very different to positive discrimination, such as recruiting or promoting someone purely on the basis of his or her gender, which except in specific cases, is illegal in the UK.

Making the business case for women-only activity within an organisation can be a complex balancing of the legal, moral, economic and social rationale for the benefits of the particular project in each context. This will be influenced by the way equality and diversity is being handled overall and the level of focus on specific gender issues. Ensuring that you have evidence and data on the relative position of women and men in your particular setting is a vital part of securing commitment to establishing a network and the basis for the benefits it will bring.

You may decide to link your network to other initiatives on flexible working, wider career development or support for parents and carers depending on the issues in your sector or organisation. It may be suggested that women don’t want women-only activity and view this as special treatment. Using evidence of examples of other networks and building support among your potential membership are important steps to counter potential resistance.

WISE can provide evidence based advice and statistics to support this conversation and in making a relevant case for positive action.

There are various types of women-in-STEM networks that operate in different ways according to the needs of their members and the circumstances in which they began. Formalised activity amongst women working in the STEM sectors started in the early twentieth century and from the 1980s a growing number of groups emerged which focused on helping and encouraging female STEM students, those seeking technical training and professionals.

In addition to the more formal networks covered by this guide, many women are part of informal women’s networks, consisting of groups of friends or colleagues that come together for support and information sharing. These networks can take place face-to-face in a social environment or online using social networking sites such as Facebook, Linked In or Twitter.
Independent organisations exist which are targeted at women in STEM at different levels and in different sectors. The WISE STEM Champions Network is an example of a smaller independent network aiming to bring together women from individual businesses to achieve specific objectives as well as to network and encourage personal and professional development.

Some networks charge membership fees in return for the provision of various services including networking, newsletters, job opportunities, mentoring and events.

- Development of these groups is usually from grass-roots and in response to an identified need, such as the desire to connect SMEs or engage in outreach. They are based on shared values, personal knowledge and experience of the issues to be addressed.

- Management is voluntary, with funds running at a minimum and dependent on membership fees (if appropriate), corporate sponsorship or small grants and donations.

- There is usually an informal governance structure, which grows as the network develops.

- Groups may be formally constituted or remain informal.

- Organisations are often driven by high levels of passion and commitment of a small group of individuals.

- Due to the small number of active individuals, succession planning for management and governance can be challenging and time consuming so think ahead.

WISE supports and facilitates various Women in STEM networks such as our WISE Hubs and STEM Champions. Some other examples of independent women-in-STEM networks are POWERful Women and the National Association of Women in Construction (NAWIC).

The WISE website has a page dedicated to the best known and most active networks: www.wisecampaign.org.uk/resources/tag/networks-organisations
There are also a large number of professional associations, companies, universities or other scientific or industrial organisations which have their own formal networks to support their women in the traditionally male dominated STEM workplace. These provide similar services and networking opportunities as the independent groups, but focus on the female members, employees or students of the parent organisation.

- Working within an organisation means these networks are able to target their membership, and may have a planned development structure which is defined at the early stages.

- They are usually coordinated part-time by a paid or voluntary staff member as part of or in addition to their full-time position, with the support of a steering group.

- The extent to which the network is linked to wider diversity and employment strategy within the parent body will affect its level of influence and effectiveness.

Some examples of women-in-STEM networks within parent organisations are Bechtel’s Women@Bechtel network and The Institute of Physics’ Women in Physics Group (WIPG).

Whilst early networks of this type were wholly focused on women, the more contemporary view is that the most effective networks encourage anyone to attend who is interested and supportive of the move towards a better gender balance in the workforce. As well as supporting the women in the parent organisation they also need to engage with men as allies and supporters in transforming workplace culture.

With this in mind, many networks have moved away from the “women’s network” label, Balance@Shell being one example. This approach also helps to demonstrate that whilst taking positive action for women may be required, you are not seeking to disadvantage or exclude men. Tailoring at least some of your events to recognise this is equally important.

For example:

- An event for new parents which includes mums and dads.

- An event on flexible working should look at a variety of circumstance not just women with children.

- An event on mentoring should encourage men and women to act as mentors.
Case Study 1

Women@Bechtel is Bechtel’s global, collaborative networking forum, which provides an open forum for the candid exchange of information, access to positive role models and valuable networking and mentoring opportunities. The forum’s mission is to empower individuals and the broader organisation to identify, understand and address the gaps between our current work environment and our vision of a fully diverse, inclusive and collaborative culture that promotes the development and advancement of women in the company.

The network was launched in 2014 and has contributed to a number of key achievements for Bechtel including being awarded WISE Diversity Employer of the Year 2015, the company attaining a 50% graduate female intake in 2016 and having places in both the 2016 and 2017 Daily Telegraph Top 50 Women in Engineering lists.

As Bechtel is an international company, with multiple projects and offices, it was important to spend quite some time at the start developing a global board and charter, which would set up and provide a consistent framework to support regional and local chapters which operate wherever Bechtel is doing business. All regional and local chapters must conform to the framework of the charter.

Women@Bechtel is led by key individuals within our organisation that have the ability and passion to influence and drive change,
at the same time as undertaking their day job. Selection of the right people to sit on the global board and regional and local chapters is key to the success of the forum. We promote accessible role models that utilise inclusivity in their language and behaviours.

Women@Bechtel is focused on three key goals (the three As) and applies its energy at three targeted levels of engagement (the three Cs). The goals are to:

• Increase Awareness of Diversity and Inclusion issues and challenges;
• Improve Alignment with the companies existing visions, values and covenants; and
• Improve everyone’s Accountability to create an inclusive environment.

These goals are focused on initiatives which engage: our Colleagues, the wider Company and the Community we work in and around.

“Having the right policies and procedures, and increasing diversity through the recruitment process is a good start but it is not enough. Our target is to develop a culture of inclusivity, the foundations of which are built by company leaders and are implemented by everyone within an organisation.”

Top tips from the Women@Bechtel networking forum:

• **Approach it like any other business strategy;** develop a charter, have a clear mission statement and annual targets that can be defined by metrics.

• **Select sponsors and board members who are passionate and accessible;** success is driven by leadership that can influence a company’s processes, policies and teams. Accessible role models should be actively promoted.

• **Communicate, communicate, communicate;** let everyone know what you are doing, share your experiences (both good and bad!) with other companies and organisations.
Setting up a Network to Support Women in STEM

Case Study 2

The West Midlands WISE Hub has been set up to provide a local network of employers, educators and professional bodies who are able to raise the profile of STEM careers with young people, parents and other stakeholders whilst also considering how to support women who have chosen to work in these sectors.

The hub was launched in December 2016 and its initial aim was to provide a self-sustaining regional WISE network of committed employers and STEM role models who will partner with schools to offer pupils, parents and teachers a programme of up to date information and guidance on STEM career opportunities, pathways and training, that will lead to an increase in the numbers of girls and young women choosing STEM careers.

In our first year, we sourced funding to train 45 female apprentice role models to work with schools, share their enthusiasm for STEM and engage in training for the delivery of the new People Like Me Apprentices resource. The feedback from these sessions was very positive and everyone who attended planned to work with schools.

However, it became apparent that sessions were useful, not just in terms of the training, but as a forum to speak openly about some of the challenges and obstacles they were concerned about as minority group within a male dominated industry. These sessions were delivered with WISE and also supported by STEM Ambassadors so that DBS checks could be completed. As a result of this collaboration, we are launching a network.

Rosa Wells
Solihull College
& University Centre,
West Midlands
WISE Hub

"I feel confident and proud to help and attend secondary schools to help get more children into apprenticeships."

"Didn't realise how much we could help younger generations."

"I have developed the confidence to inspire young girls."

"Keep running these events, they are really useful."

Comments from apprentices at Solihull College & University Centre
Setting up a Network to Support Women in STEM

A forum sponsored by STEM Ambassadors where women working in STEM careers in the region can meet and support each other.

We have a steering group which meets three times a year to review the activities that have been delivered and suggest new ways in which the hub can develop. The steering group is attended by schools, engineering companies, professional bodies, the local council and other stakeholder groups such as engineering charities and The Chamber of Commerce.

We found, when setting up the hub, that we were able to attract a wide variety of employers as members with individuals signing up to help with events. The challenge was to get schools to work and talk with us. The steering group was essential in working through different channels to ensure schools could see the benefit of engaging with us. The local council, chamber of commerce and also groups such as enterprise advisors were able to link us directly with schools. It is also important to involve other charitable groups working with schools in the region such as Tomorrows Engineers and STEM Ambassadors. This collaborative approach means schools feel less confused about the variety of outreach activities available to them.

“There are currently big cultural issues in the UK surrounding the perception of what engineering is and especially engineering apprenticeships. We are engaging with WISE in the form of a regional hub, working with the network of outreach organisations locally to inform, action and follow successful journeys of women in engineering.”

The top tips from the West Midlands WISE hub

- Be responsive to the needs of your members
- Ensure your steering group represents a wide variety of stakeholders
- Work collaboratively with other charitable/outreach organisations so that a consistent approach is used with schools
1. Establishing a need

The strongest networks are member-led and member-driven. So whether the impetus to set up your network comes as part of a wider diversity strategy by an organisation or from a grass roots decision by a small group of women, it is important to carry out some preliminary market research to gauge the level of interest for the idea.

This can be in the form of a survey, direct approaches to potential members or running focus groups amongst your target audience to assess the potential demand for a network. The most appropriate means of carrying out this research will depend on whether the network is to be independent, sector specific or part of a parent organisation. For example, for the STEM Champions Network, it is envisaged that the introductory/launch meeting should be used to canvas opinions of the audience on future involvement and activities.

Many women may not be aware of what a formal network can offer – so put together a wish list of services you would like to provide and ask women what would interest them the most. Use a survey, meeting or focus group to find out how your target audience would like to be communicated with: traditional newsletters, emails, text or via social networking sites, for example.

Look around and find out what other networks are out there. You may find one in existence which would meet your needs and to which you can bring fresh ideas and members, rather than starting anew. You may find one which follows a similar model to your proposed network from which you can gain ideas and best practice.

If you are seeking funding or endorsement from a parent or other organisation, use the research to prove the need for your network to support your bid.
2. Aims and objectives
The research you have carried out will have given you a clear idea of the needs of your potential members and from this you can draw up the aims and objectives of your network. Make sure you articulate these clearly: write them down in black and white. If you are part of a parent organisation, you may also need to show how your aims and objectives contribute to that organisation’s diversity or business strategy.

Aims are usually general goals, for example: to provide support for women working within mechanical engineering, bioscience or chemistry to progress their careers.

Objectives are usually more specific, for example: to run quarterly networking lunches, with a target regular attendance of 20 individuals.

While your aims are unlikely to change, as they articulate your values and vision, the means by which you work towards those aims – your objectives – are likely to evolve as external circumstances change. Set objectives for an agreed time period and then review and adapt them as necessary.

Use evaluation and feedback from your members to determine how successful you are in achieving your objectives and whether new or revised objectives are needed (see Communication and evaluation on page 16).

3. Funding and endorsement
Different kinds of networks will have different funding needs. Informal or social networks may not require any external funding, independent networks will need to find funding to develop their services. Networks supported by a parent body still require a budget and resource allocation to ensure they succeed and are able to cover modest costs such as catering, speaker fees and travel expense without worry.

Some ways to raise funds are:
- Annual membership fees
- Event entry fees
- Corporate sponsorship
- Selling advertising on your website or in your newsletter
- External funders (the network may need to adapt/change its focus dependent on the funder’s criteria)

Some ways to save:
- Ask colleagues, friends and members to be speakers
- Get free meeting rooms through member contacts
- Small networks can meet at people’s homes or businesses

There is funding and support available for charitable organisations from a range of sources. However, funding applications are time consuming, competitive and usually for specific projects not to cover general running costs.

For support on sourcing funding and writing funding applications contact one of the specialist organisations that exist to help charitable groups diversify their funding streams. Examples include the Women’s Resource Centre and National Council for Voluntary Organisations (NCVO).
If your network is part of a larger parent organisation, it is very important to get senior level endorsement from that organisation for your activities. This will both smooth the way politically and practically for you to gain access to resources such as meeting rooms and make it more acceptable for those within your organisation to join the network. Whilst it is likely that the majority of those joining will be women, it is important to make it clear that men are welcome and to engage with key male sponsors, champions and influencers in your organisation or sector. Your network will also be more effective in changing the culture of your organization and influencing the careers of the women involved if its work has influence at senior level and ties in with other diversity activities.

For independent networks, endorsement from senior and respected figures within the target sector is also important for similar reasons. Who are the most well-known women in your field – can you recruit them as founder members?

Every successful network can benefit from a champion to lead the way and inspire members.

4. Leadership, operation and governance

Ideally every network needs a dedicated and devoted leader to illustrate the need for the network, and develop it in line with the mission and objectives. Leadership qualities are important to ensure that members and supporters feel comfortable with the network and the drivers behind it. Leading a women’s network involves time, motivation, perseverance, empathy and commitment.

The leader will need to be realistic about how much time can be committed to the network and be fully aligned with what the members need. The network leader is likely to become the ‘face of the network’ and will be responsible either solely or jointly for its progression and sustainability. However, where a strong steering group can be developed this role can be shared between key members of the team.

Networks, whether independent or supported by a parent body, will benefit from a clear governance structure. This may vary from a steering group, management committee, or a formal board of trustees.

A governance structure helps the founders/leaders manage the activities of the network and delegate responsibility where appropriate. More advice on governance and leadership support can be found in the free, online resources provided by the NCVO.

In reality, most networks are run by a small number of active members, who organise and publicise the events, manage the database and communications and keep the energy and momentum going. If keeping it simple is best for you that is fine!

For your core team:

- Sharing the same values and expectations is key
- Establish ground rules and systems for the operation of the group for an agreed period and review
- Allocate roles to ensure everyone is clear on the work they need to do
- Ensure good communication links for the management group
- Encourage active members to support each other in tasks
- Play to the strengths and expertise available
Each network will provide activities and services to suit their particular membership, sector or organisation. Your initial research will have shown the kind of activities most of interest to your potential members. It will soon become clear what works and what doesn’t with your target audience.

**Some practical tips for successful events:**
- Be realistic about the level of attendance needed to make it a success – and don’t assume everyone will turn up
- Cabaret style is a popular choice for networking events to encourage circulation
- Allow plenty of time for networking in the meetings and find ways to encourage everyone to engage
- Ensure speakers promote an interactive, learning environment
- Invite members to give a talk about their own interests
- Encourage interaction, movement and energy
- Ensure there is a real hook to engage busy people
- Get dates in the diary well in advance so people can plan
- Vary your focus, format and topics to maintain interest
- Vary day, time and location so not to regularly exclude anyone by way of caring commitments or part time work schedule.
- Provide food and drink to encourage a relaxed, informal environment but don’t over cater as it often goes to waste.
- Make access, transport and car parking easy
- Site visits are often popular for women working in STEM

**Ideas for session content:**
- Inspirational Career Talks from senior women
- Outreach activities and events – plan a Bring Your Daughter to Work Day or International Women’s Day activity
- Learning New Skills – Twitter or LinkedIn Masterclass or Media Skills
- Networking Skills
- Speed Mentoring or Mentoring Training
- Professional Advancement – Chartership or Professional Affiliation
- Focus Groups to think creatively about how to advance policy and practice; for example, flexible working
- Sharing Good Practice via visiting speakers, including WISE

**Avoid** things like Dress for Success and Image Workshops as these tend to imply that the women must change and also tend to generate a negative response from a large percentage of your target audience.

**Accept** that you will get some push back from both men (who don’t understand the need) and women (who don’t feel comfortable with positive action).
5. Communication and evaluation

A successful network will have good communication in place to keep members informed of what is happening and to enable regular contact between members.

Your research will have shown what forms of communication your members prefer. Keep good records, with up-to-date contact details for your members and information on how they wish to receive information.

Make the most of new technologies to make your life easier and think creatively. Use email, social media and text messages to get word to your members. Make it as easy as possible for them to get information about what is happening and to keep in touch with each other between events.

Hopefully, your membership will continue to grow as your network develops. With a changing membership may come changing needs and expectations. Make sure you maintain your network’s success and effectiveness through regular evaluation to ensure members are getting what they want from the service. Some methods for getting feedback from your members are:

- Interactive group sessions
- Written evaluation forms
- One-to-one discussions
- Emails
- Online questionnaires posted on your website
- Forums and debates

Ensure you take feedback into account and communicate back to your members the outcome of any survey or evaluation after an event. This will reinforce to members that it is worth filling out the forms and making the effort to send in their views and ideas.

Use the results of the evaluation to feed into the regular review of your objectives and adapt your activities accordingly.

If you are interested in setting up a network for women in STEM, or require support in developing or reviving an existing network, WISE can provide support, signposting and advice.

6. Positive action

Positive action is the deliberate introduction of measures to eliminate or reduce discrimination, or its effects, including gender stereotyping. Positive action goes beyond a ‘non-discriminatory’ approach. It is not about special treatment for any one particular group, but the fair treatment of all people. It is concerned with ‘levelling the playing field’ and taking account of the effects of past discrimination and disadvantage, so that everyone has genuine access to the same opportunities.

The Equality Act (2010) recognizes that some equality groups (eg. women) are disadvantaged in some areas of life as a consequence of past or current discrimination and exclusion.

The Act enables public, voluntary and community and private sector employers and providers of services to take steps to help particular groups overcome disadvantage, meet needs that are different from the needs that are different from the needs of other groups or increase participation.

Therefore the Act makes it lawful to take positive action measures that involve different treatment of different equality groups which would be otherwise unlawful.
For positive action measures to be considered lawful three conditions must be satisfied:

• The employer or service provider must reasonably think that the group in question suffers a disadvantage, has different needs or has a disproportionately low level of participation.

• The employer or service provider takes action with the aim of enabling or encouraging the group to overcome or minimize their disadvantage, meeting their needs or enabling or encouraging participation.

• The action is a proportionate means of achieving that aim.

Positive action is not the same as positive discrimination, an example of which would be recruiting or promoting someone purely on the basis of his or her gender. It is illegal to recruit someone purely on that basis, unless there is a genuine occupational requirement (GOR).

However, the law relating to disability is fundamentally different from other equalities legislation; it is lawful for employers to advertise certain posts as only being available to disabled people.

Note: The Equality and Human Rights Commission has information about legal matters and can advise on the up-to-date position: www.equalityhumanrights.com

Acknowledgement: This definition is based on that provided by the Women’s Resource Centre in their document Women Only Services – Making The Case, which can be downloaded from their website: www.wrc.org.uk

7. Summary for success

• Set the theme
Start by asking yourself what you want to achieve through the network. Is there a particular theme or issues you want to focus on? Consider carrying out research amongst target or founder members to ensure this is clear and well supported.

• Be inclusive
Be the change you want to see! Ensure that not only women of all backgrounds, ethnicity and sexuality feel welcome but also that men who want to be active supporters, mentors and champions of balance in the workforce are also invited.

• Give structure to the network
A useful model to consider is a steering group led by a ‘chair’ with members drawn from each part of the business/sector.

• Target buy-in from senior leaders
Look to secure senior buy-in to your network and use high profile messages of support to highlight the importance of the gender balance issue.

• Align with business objectives
Aligning with business or sector objectives is a key way to ensure that not only do women feel supported and inspired but that the business benefits of diversity are also realised.

• Make time for networking
The clue is in the name and so ensuring that there is sufficient time for networking is important. For younger or less confident attendees icebreakers or creative ways to encourage connections can also be helpful.
• **Personal and professional development is a key benefit**
  Gaining access to knowledge, learning a new skill or updating an old one are great ways to make your meetings valuable to your members.

• **Bring in the right people**
  If you are aiming to help women advance to more senior levels, it makes sense to ensure that you have senior women and men actively involved. In addition, key speakers from other companies and industry bodies can be great connections.

• **Mix it up**
  Use variety to keep interest high and ensure varied attendance.

• **Get the network noticed**
  Longer term, think how the network might gain profile and status, internally or externally, via the media or industry awards.


WISE (2017) *Mentoring Training Manual*

