

North Tyneside Council

Report to Cabinet

13 April 2015

ITEM 5 (a)(i)

Young Women and STEM - Overview, Scrutiny and Policy Development Committee Sub Group Report

Portfolio(s): Children, Young People and Learning

Cabinet Member(s): Cllr I Grayson

Report from: Overview, Scrutiny and Policy Development Committee

Wards affected: All

PART 1

1.1 Purpose:

The purpose of this report is to present the recommendations of the Children, Education and Skills Sub-committee in relation to its study into Young Women and STEM (science, technology, engineering and mathematics).

In accordance with Section 122 of the Local Government and Public Involvement in Health Act 2007, Cabinet is required to provide a response to the recommendations of the Overview, Scrutiny and Policy Development Committee within two months. In providing this response Cabinet is asked to state whether or not it accepts each recommendation and the reasons for this decision. Cabinet must also indicate what action, if any, it proposes to take.

1.2 Recommendation:

It is recommended that Cabinet consider and formulate a response to the recommendations presented to them as a result of the Overview, Scrutiny and Policy Development Committee's study into young women and STEM.

1.3 Forward plan:

The report was included in the forward plan published on 13 January 2015 for the period 13 January – 30 April 2015 under the heading 'matters arising from Overview, Scrutiny and Policy Development Committee and its sub committees'.

1.4 Council plan and policy framework:

The report contributes towards the following priorities of the 2014-18 Our North Tyneside Plan:

Our People B - Be supported to achieve their full potential, especially our children and young people.

Our Economy C - Have local people that have the skills that businesses need.

1.5 Information:

- 1.5.1 As part of the Children, Education and Skills Sub-committee work programme for 2014/15, a report on the 14-19 years curriculum was received on 20 October 2014 which generated discussion on a number of topics. It was agreed that the options for a sub group on one of the topics be presented to the next meeting of the sub-committee. On 17 November 2014 it was agreed to establish a sub group to examine how to encourage young women to study STEM (science, technology, engineering and mathematics).
- 1.5.2 STEM was selected because areas of employment growth in the borough were anticipated within the technical, manufacturing, engineering and digital sectors. It was important that young people had the relevant skills and qualifications in the area to enable them to benefit from the expected employment growth and that these opportunities were taken up by boys and girls. It was considered that the Sub Group could make a positive contribution to the formulation of future plans or strategies and would allow for community involvement.
- 1.5.3 The remit of the Sub Group was to examine the attempts at increasing the numbers of girls and young women studying STEM subjects; to consider the success of these attempts; and to consider other actions which could also increase the numbers of girls and young women studying STEM subjects.
- 1.5.4 Members held a series of evidence gathering meetings with representatives from organisations and schools and also spoke to some young women studying STEM subjects at GCSE and AS Level and as apprentices.
- 1.5.5 As a result of the study the Sub Group have identified six recommendations for submission to Cabinet which are:
1. Cabinet requests the Head of Children, Young People and Learning to organise a programme of events/resources for teachers, particularly for teachers of Years 7 to 9, with up to date information on what opportunities and careers can be expected by anyone with STEM qualifications and an understanding of how to access these, including the vocational route.
 2. Cabinet requests the Head of Children, Young People and Learning to ask all schools to review existing information for parents of children aged 11-14 to provide increased focus upon what opportunities and careers can be expected by anyone with STEM qualifications, but particularly for women, and an understanding of how to access these, including the vocational route.
 3. Cabinet requests the Head of Children, Young People and Learning to ask each school in the borough to assign the responsibility for promoting STEM to a named member of staff and a governor. These people will have the responsibility to promote STEM as a subject and particularly focus on ensuring the participation of girls and young women.
 4. Cabinet requests the Head of Children, Young People and Learning to improve the existing school and local authority STEM network for the STEM leads/co-ordinators and ensure it meets regularly to share practice, co-ordinate ideas and organise regular events.
 5. Cabinet requests the Head of Children, Young People and Learning to ask all schools to consider holding girl only science, maths and IT clubs or if this is

unfeasible advertise the girls only clubs which are held elsewhere.

6. Cabinet requests the Head of Children, Young People and Learning considers what support and advice would need to be offered to all middle/secondary schools to enable them to pilot single sex classes for STEM subjects and to explore these options at a meeting of the STEM Network.

1.5.6 The full report which outlines the key findings, conclusions and recommendations of the review is attached at Appendix 1. With regard to recommendation 3, relating to assigning the responsibility for promoting STEM to a named member of staff and a governor, the Overview, Scrutiny and Policy Development Committee were minded that it would be appropriate if the responsibility was assigned to a female member of staff or governor where possible and ask Cabinet to take this suggestion into consideration when determining their response.

1.5.7 Cabinet has a statutory duty to respond to the Overview, Scrutiny and Policy Development Committee's recommendations within 2 months of receiving them. In providing its response Cabinet is asked to provide reasons for any recommendations which are not approved. Overview, Scrutiny and Policy Development Committee is of the view that the recommendations set out in the report will begin to break down the barriers that girls and young women face which will lead to an increase in participation in STEM subjects by girls and young women. This in itself will break down more barriers and encourage more girls to do the same until women studying and being interested in STEM subjects is not seen as noteworthy.

1.5.8 After the first meeting of the Sub Group it was clear that the subject of STEM and young women's engagement with it was a very wide reaching and complicated area of investigation. The Sub Group have restricted their formal recommendations to the questions posed in their original remit but do want to request that further consideration be given to the following:

- a) STEM Hubs for each tier (primary, secondary and higher) created at schools with the facilities to be used by all schools in the borough. There are already excellent facilities in the borough at Marden High School and Norham High School and these will be added to by the STEM Innovation Centre being established by TyneMet College at the former Skills and Enterprise Centre on Embleton Road. Having a place to go to do STEM events and meet others will be a great motivating factor for young people and allows all to have the opportunity to use the best equipment.
- b) An evaluation of the information available in careers' libraries and the understanding of those giving careers advice of the current and future possibilities that STEM subjects open up for students.
- c) Working with the North Tyneside Learning Trust to ensure a co-ordinated approach is essential and their role engaging with the business sectors should be used to its full potential.

1.6 Decision options:

The following decision options are available for consideration by Cabinet:

Option 1

Cabinet accepts the recommendation set out in paragraph 1.2 above.

Option 2

Cabinet does not accept the recommendation set out in paragraph 1.2 above and provides a response to the Overview, Scrutiny and Policy Development Committee at the meeting.

Option 1 is the recommended option.

1.7 Reasons for recommended option:

Cabinet has a statutory duty to respond to the Overview, Scrutiny and Policy Development Committee's recommendations within 2 months of receiving them. Option 1 is recommended as this option allows Cabinet time to consider and formulate a response to the recommendations.

1.8 Appendices:

Appendix 1 – Overview, Scrutiny and Policy Development Committee Report: Young Women and STEM.

1.9 Contact officers:

Elizabeth Kerr, Democratic Services Officer Tel: (0191) 643 5322
Shona Duncan, Principal Manager - Employment and Skills Tel: (0191) 643 6065

1.10 Background information:

- [North Tyneside Council Constitution](#)
- [Minutes of Children, Education and Skills Sub-committee meetings held on 20 October, 17 November 2014 and 16 March 2015.](#)
- [Minutes of Overview, Scrutiny and Policy Development Committee meeting held on 30 March 2015.](#)
- [Background information used in the formulation of the Young Women and STEM report can be found on page 21 of the report.](#)

PART 2 – COMPLIANCE WITH PRINCIPLES OF DECISION MAKING

2.1 Finance and other resources

The financial implications associated with each recommendation will be included in Cabinet's response to this report.

2.2 Legal

There are no legal implications at this stage.

2.3 Consultation/community engagement

The Sub Group which undertook this work on behalf of the Overview, Scrutiny and Policy Development Committee met with officers in the Children, Young People and Learning Service; a number of schools and education providers and their students; and a representative from the North Tyneside Women's Voice Network. Full details are listed in the Sub Group's report attached at appendix 1.

2.4 Human rights

There are no direct issues relating to human rights arising from this report.

2.5 Equalities and diversity

The underrepresentation of women in STEM related careers and its impact is detailed in the Sub Group's report attached at appendix 1.

2.6 Risk management

There are no direct issues relating to risk arising from this report.

2.7 Crime and disorder

There are no direct issues relating to crime and disorder arising from this report.

2.8 Environment and sustainability

There are no direct issues relating to environment and sustainability arising from this report.

PART 3

The following officers and Members have been sent a copy of the report for their information:

- Chief Executive
- Mayor/Cabinet Member
- Chief Finance Officer
- Monitoring Officer