Girls in Physics Update

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It’s Different for Girls
An exploration of data from the National Pupil Data-base

- Published October 2012

- Looking at progression to A-level physics from different types of school at KS4.

- Assuming that pupils’ experience of teaching at KS4 will be a critical factor in choice of A levels.

- Are there patterns in the type of school where pupils’ sat their GCSEs and progression on to A-level physics?
Closing Doors
Exploring gender and subject choice in schools (December 2013)

![Bar chart showing the percentage of girls and boys in various A-level subjects, with the percentage of girls nationally progressing to A-levels at 53%.]
New projects

- SPN Phase 4 – Improving Gender Balance Pilot project
- Drayson Girls in Physics Pilot Programme
- Opening Doors in conjunction with the Government Equalities Office
SPN and Girls in Physics

- SPN has been one of very few interventions to have an impact on the gender balance of progression to A-level physics.

% increase in progression to AS-physics, 2011-12

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Improving Gender Balance

- The programme will trial several approaches to tackling the issue, and consists of three strands:
  - Strand A – Working with the girls on building confidence and resilience;
  - Strand B – Working with teachers on improving the experience of girls in the physics classroom;
  - Strand C – Working with whole schools on their culture with respect to gender stereotyping.
The programme

- Each strand will work with a number of Partner Schools, each with a dedicated project officer providing bespoke support. The officers have now been appointed.

- We are currently identifying 20 Partner Schools.

- In-school support will begin in September 2014 and run until March 2016.

- An independent evaluation with the findings being integrated into support provided by SPN and other IOP networks.
The Drayson Girls in Physics Programme

- Generous donation from the Drayson Foundation
- Three-year pilot programme
- Complementary to the IGB projects
The project

- A combination of the three IGB strands, starting with whole school work (IGB Strand C).

- 6 Partner Schools in the London/Thames Valley area will be supported by a Project Officer.

- Same evidence base as IGB but incorporating successful aspects of IGB work as we learn.

- Three year funding (until December 2016) allows more flexibility and agility of response to emerging findings.
IGB Strand A

Working with girls directly, and to possibly include:

- facilitated workshops to raise awareness of gender stereotyping,
- priming sequences and working on girls confidence and resilience,
- primary outreach science projects using Y9/10 girls as facilitators
- extended support from STEM Ambassadors.
IGB Strand B

Working with teachers of physics and to include:

- Teachers supported in implementing gender-aware pedagogy and classroom management.
- Encouraging reflective practice
- ‘The big picture’ – additions to schemes of work
- Embedding careers information into teaching
- Strengthening the quality of practical work
IGB Strand C: Whole school work

A bespoke programme of support that may include:

- Benchmarking data on progression and attainment.
- Developing a whole school action plan.
- Workshops with teachers on gender and subject choice.
- Sessions with pupils about gender identity.
- Celebrating the school’s commitment to gender equality.
How can you help?

Provide support for project officers by assisting with:

- Speakers
- Role models
- Visits to universities
- Support for STEM clubs
Opening Doors

- Establish a series of regional networks of local schools interested in combatting gender bias and stereotyping.

- The networks will offer mutual support and share best practice in this area.

- Arrange site visits to each school (along the lines of Project Juno) with a view to developing a code of practice on advancing gender equity in schools.

- Role out across the country after an initial trial lasting a year.