

Inclusive learning in the physics classroom – a checklist for teachers of physics

Background

This checklist is a set of questions designed to help teachers of physics to record and extend their own gender-inclusive practice. It may also be helpful for use in appraisals by line managers, as well as for use by teacher trainers and inspectors. The list is based on the IOP's Engaging with Girls report (2009) and more recent work from the Improving Gender Balance project. More information on the project and copies of the full report can be found at iop.org/genderbalance

Check your gender-inclusive practice in schemes of work and individual lessons	I do this routinely	Needs further development
Have you asked your classes what they think physics is, and why physics is useful to study? Did you monitor the answers from the girls and boys?		
Have you got “real-world” examples to use to introduce each new topic?		
Do you select analogies, examples and themes for assignments that both genders are equally likely to be able to relate to (e.g. tennis and cycling in addition to football and cars)?		
So that work has a clear rationale, do you make a point of following the sequence: applications – principles – applications?		
Do you give examples of careers that use the knowledge and skills developed in the topic?		
Do you expose your students to a diverse range of scientists?		
Do you use a variety of questioning techniques?		
Do you adopt styles of questioning that take account of some girls' stated preferences for time for reflection and discussion?		
In group and project work, do you ensure that roles are rotated so that all students have equal access to equipment, and take a turn doing note-taking and clerical activities?		
Do you monitor the proportion of time that you spend interacting with boys in comparison with the time spent interacting with girls?		