

GCSE and A-level Science qualifications in Northern Ireland

Education Challenges for the UK Food Industry
(Thursday 10 September 2015; Royal Society of Arts
[Benjamin Franklin Room], London)

Gavin Gray MInstP, Csci(teach)

- Manage the Senior Examination Teams, Oversee Quality Assurance, Specification Development, Revision, School Support and training
- For Entry Level Science, GCSE Single Award Science, GCSE Physics, GCE Physics, SA/ DA GCE Applied Science
- Chartered Science Teacher, Chairman of ASE Council UK, Committee of IOP (Ireland), Critical Friend DfE, Senior Leader Schools, LEA 14-19 School Improvement Team



NI Context- Entitlement Framework(DE NI)

THE REVISION

Articles 18, 19, 20 and 22 of the 2006 Order make it a legal requirement for Boards of Governors to provide access to at least the specified number of courses at Key Stage 4 and post-16, of which at least **one third** must be courses that are designated by the Department for the purposes of the Entitlement Framework as “**general**” and **one third courses that are designated as “applied”**. At Key Stage 4, Article 18 includes a requirement for schools to ensure that at least one course shall fall within each area of learning and at least one shall be a course in an official language of the European Union (other than English and, in Irish speaking schools, Irish)

By 2016 Schools must offer

Key Stage 4= 24 courses,

Post 16= 27 courses

http://www.nicurriculum.org.uk/key_stage_4/entitlement_framework/

What is the structure of Science Qualifications in Northern Ireland?

No statutory requirement for students to follow a science course of study at Key Stage 4 in Northern Ireland

Key Stage 4- Open Market

Entry Level Science

Available at levels 1,2 and 3 for students that would struggle to access a Science GCSE, a blend of Chemistry, Biology and Physics assessment is by portfolio of evidence and a sample is externally moderated. It has been used by Special Schools, Alternative Provision Centres but increasing numbers of Secondary Schools are choosing it as an alternative to BTEC.

GCSE

Single Award- Not a subset of Double Award and Separate Sciences. Blend of Chemistry Biology and Physics two tiers of entry higher and Foundation. Assessment by 3 modular exams and a CAT (Controlled Assessment task)

Double Award- blend of 3 sciences. Examined by 6 modular exams (and two CAT's)- tiered entry

Separate Sciences- 2 exams and a CAT in each- tiered entry

GCE/ A-Level

- AS leads onto A2 no decoupling
- Retain Modularity but only summer series
- Retain Practical Assessment within qualification (20%)– externally assessed as in the current specification
- Adhered to Ofqual Core content with other AO's, Maths content enhanced(Smith Report) in order to ensure portability across UK

Applied A-Level

- Developing an Applied A-Level in Science, Double and Single Award (1st Teaching Sept 2016)
- To meet needs of Learners and provide pathways to STEM HE Courses-
- Programme of Government
- Entitlement Framework
- Step- Up (success of students completion rates)

Bridging the Gender Gap

“The number of girls taking so-called STEM subjects - science, technology, engineering and mathematics - at A-level has seen a notable increase”

<http://www.bbc.co.uk/news/uk-northern-ireland-33896235>

Questions?

- Thank You