BTEC First in Applied Science Legacy to New Units for units 1 to 6

The regulator took a interest in the Applied Science as part of the 14-19 strategy and we had to amend the content/assessment criteria to meet the requirements of the KS4 statutory requirements and coverage of the new Extended Certificate and Diploma and their equivalences to GCSE Additional Science and Single Sciences.

Biology Units

Biology content

The new biology units 3 and 6 compare favourably to the legacy unit 5. There is not much difference between the content when you look closely at the detail.

Biology Assessment criteria

When looking at the assessment criteria of the new units it appears that there are more assessment criteria in the two new units compared to the legacy unit. However when looking in detail at the criteria there are the same number of 26 in both.

Qualifications on the QCF do not allow assessment criteria to contain statements such as investigate and describe (they need to be separated into separate criteria) – this has led to an additional criteria in the 2 units.

Chemistry Units

Chemistry Content

The chemistry content of the new units 1 & 4 is very similar to the legacy unit 3 and the content is still indicative.

There is some additional content in the new unit 1, which is the Physical Properties of substances . This is additional because of KS4 criteria requirements.

In unit 1 the uses /applications in outcomes 1 to 3 all have egs and therefore only one example needs to be covered. Uses/applications would normally be covered by a teacher/lecturer during their delivery and only in outcome 1 is this assessed at Merit grade.

Assessment Criteria

There are more assessment criteria in the two new units compared to the legacy unit.

Qualifications on the QCF do not allow assessment criteria to contain statements such as investigate and describe (they need to be separated into separate criteria) – this has led to an additional seven criteria in the 2 units. Overall 26 criteria in the legacy unit to 30 criteria in the new units.

The writers have tried to make the assessment criteria more bite sized and coherent and give a better coverage of the content.

Unit 1 P4 asks the learner to Carry out an investigation into the chemical properties of elements in Groups 1 and 7 (of the periodic table). This **does not** mean learners need to carry out practical work – it asks the learner to investigate – this can be done by looking at video clips, teacher demonstrations and from other learning materials etc.

The learning criteria P2 stipulates carry out a **practical investigation.**

Physics units

Content
The content for the two new units is similar to the legacy unit. However, additional material has been included in order to cover KS4 criteria requirements, in particular, motion and forces. To allow for this, some material has been removed eg *Astronomy applications, molecular theory*. There are a number of egs in the content section (eg learning outcomes *be able to investigate motion* and *be able to investigate forces*); only one example needs to be covered in these cases.

Some material has been moved to different sections eg the Hubble telescope now appears under the learning outcome Be able to investigate light and sound waves.

Some material has been amended eg waves for communication has been changed to waves used for communication and this will take less time to cover than in the original.

Q & A

Question: Do learners need to carry our practical work to provide evidence for the Unit 1 –P4 assessment criteria

Answer: No they do not. The assessment criteria does not stipulate practical work. Learners can provide evidence from books, learner materials, video clips , teacher demonstrations etc.