



Claydon High School: Short case study in science

Developing Controlled Assessment Specific Vocabulary

1. Background

All students at Claydon High School are entered for at least two science GCSEs and on average 47% are entered for three GCSEs in science. Students are taught in classes which are set by ability. This is decided upon by use of KS2 APS on entry at year 7 and then data accumulated from formal testing, teacher assessment and end of year exams is fed in when adjusting the groups.

2. Issue(s) being addressed

Students find the 25% Controlled Assessment (CA) component of the examination challenging. Often students were unable to understand and use the scientific language they needed to use in order to access the marks from the assessment. Additionally some students have a tendency to 'waffle' and, despite writing significant amounts, achieve very low marks on these questions.

The department has taken the opportunity to focus on key word language of the CA across all year groups, but with a particular focus on GCSE groups for the collection of quantitative results

3. What happened/what you did

Learning mats and wall displays were created which highlight the key terminology associated with the analysis and evaluation of controlled assessment. These concepts were explicitly referred to and applied to weekly practical experiences.

To support students' answering of QWC questions in KS3 & KS4, staff focused on a number of strategies including:

- a. Scaffolding of answers – explicit opportunities for students to discuss, sharing key words or structuring before answering
- b. Highlighting command words and key subject words in questions and ensuring understanding of context
- c. Connectives activities to structure extended writing.

Data was collected from a student survey with Year 10, quantitative data was collected from an analysis of year 11 CA teacher assessment and work with KS3 students has been considered.

4. What was the impact?

Students have become aware of the concepts of accuracy and are regularly asked to challenge their practical procedures in order to self-assess and stimulate constructive criticism.

Students have also become familiar with the key concepts via end of unit assessments which asks them to identify the most influential variables following a practical experiment scenario.

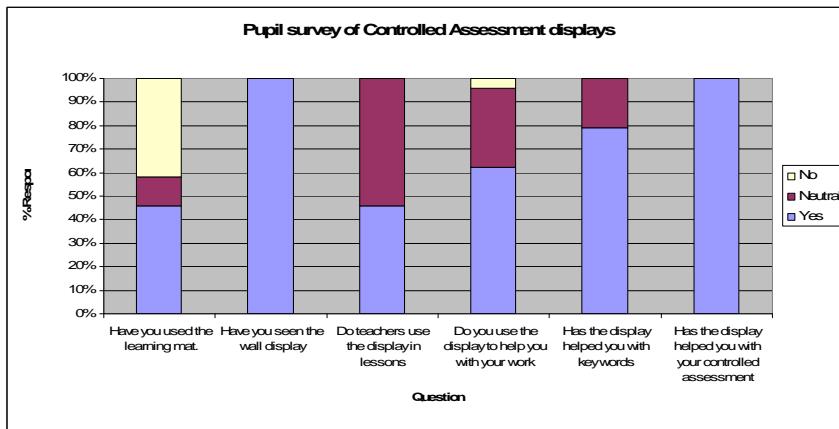
There has been a measurable improvement in the quality of year 10 and year 11 CA pieces of work compared to previous years and overall, improved confidence across all year groups, through practice and exposure to command words.

5. A teacher reflects on one student example

Claydon High School: Case Study

Mastering the use of the CA terminology is very important in order to achieve a minimum of a 'C' grade in the science controlled assessment. This was particularly challenging for a group of lower achieving students. Working with this group, I used our wall displays and learning mats to try to improve their performance for this part of the GCSE. Of the 10 students, 4 of them achieved a 'C' in their CA and 5 achieved a B.

In particular, one student was able to move up from a 'D' in the initial practice to a 'B' in both pieces of CA which is examined work. Initially, he was quite negative about "not being able" to cover the skills which were needed but being able to refer to the wall displays and learning mats often was significant for him in building confidence, supporting his language skills and promoting the key literacy skills in the subject. This student answered "yes" to all questions on the Science questionnaire seeking student opinion on what teaching techniques supported their learning.



6. Next steps

We plan to continue the focus on vocabulary, specifically within KS3 as a means to preparing them for GCSE by:

1. Potentially including Controlled Assessment practice in KS3 assessments
2. Focussing on appropriate command words included in the new KS3 assessments
3. Ensuring appropriate command words and mini CA practice exercises are written into the new KS3 science curriculum for implementation with year 7 Sep 2014
4. Making available key terminology 'learning mats' for each laboratory.