## Case Study A.
Examination results for Key Stage 4 Previous grade spread for double Award compared to 2008 Core Science results. (Average grade per student and percentage of students obtaining A*-C pass)

<table>
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<tr>
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CCL piloted in 2004 results and reinstated 2008
Outcome 2006
- Year 8 Piloted scheme last year with 2 middle ability cohorts (46 students). At the end of year 8:
  - Almost every student acquired at least level 6.
  - More students acquired level 7 than the subsequent year 9.
  - Some students went up 2 levels in one year (normal National and school average is 2/3 level).
  - Many students outperformed the sets above.
  - All were able to access and began GCSE the following year one year early.
  - Results and work confirmed by outside consultants.

Outcome 2007
- CCS was crafted into subsequent top cohort in year 9 and year 10 middle group.(2006/7 Cohorts)
  - Both year groups had significantly higher GCSE results (above 20% increase).
  - Year 7 and 8 students began the new course with all staff.
  - Within several weeks students are performing high level conceptual science which can only be measured using year 11 GCSE material.
  - Work and results validated by 3 outside consultants and external audit concluded that there was ‘A need for the curriculum to be recognised as a world class development.’ 9 (R. Dunne)
  - CCL crafted into middle order KS4 students.
  - Presentation of work to parents.

Outcome 2008
- Continued statistical analysis of data and Departmental Ofstead Inspection (Dr A. Jarvis: Serco)
  - After first science GCSE current Year 11 (2008) Cohort showing 19% increase A*-C pass rate on previous year and a 26% increase on 2006 cohort prior to any CCS initiative.
  - Percentage of students attaining A* - A currently 35%: an 18% increase on previous year.
  - Many students at KS4 raised attainment 2, 3 and 4 grades in twelve months.
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Findings

Ofstead Report Findings (Serco; Dr A. Jarvis)

- The school has had the confidence to develop a distinctive science curriculum accelerating student progress and use of abstract ideas.
- Examination results at both KS3 and GCSE are well above average and standards very high being helped by the strong baseline established at KS3.
- In year 9 standards are very high and indicates very strong progress and achievement (value added).
- The distinctive curriculum developed for year7-9 and GCSE is making a good contribution to the raising of standards.
- Students in lower attaining sets making better progress than those in higher sets and some individuals making extremely rapid progress.
Summary

- The development of the CCL tool has impacted on students learning in many ways but significantly allowed mapping of abstract ideas and concepts. More importantly CCL allows the opportunity to see understanding in a visual context as well as misunderstanding and eradicating misconceptions. It provides evidence based outcomes.

- During this period it was observed that half the students have a conceptual cognitive preference. These were mostly the ‘Middle ability’ sets. These contain the majority of disaffected or demotivated students who did not understand the subject. As understanding improved so did motivation and confidence. Most caught up on academic grades.
Case Study A Science Results 08

Comparative Data 2005&6 -2008 KS4
Comparative Data 2005 -2008 KS3
2006 - 2008 KS4 Comparison

- Comparison of 2006 - 2008 GCSE results.

The 2006 - 2008 Year 11 Core GCSE results A* - C pass rate from (66% - 91%) Up 25%

- A* - A (11 - 26% ) percentage increase = +136%
- A* - B (35 – 63%) percentage increase = +80%
- A* - C (66 - 91% ) percentage increase = +38%.

Year 11 Combined GCSE results were 88% A*- C
- An increase of 22 % and percentage increase = +33%
- All year 9 students start GCSE a year early.
2005 - 2008 KS4 Comparison

- CCS was crafted into subsequent top cohort in year 9 and year 10 middle groups. (2006-7 Cohorts) Comparison of 2005 GCSE results (prior to CCL) and 2008 results was made.

The 2005 - 8 Year 11 Core GCSE results A* - C pass rate from (66% - 91%) Up 28%

- A* - A (14 - 26% ) percentage increase =  + 86%
- A* - B (31 - 63%) percentage increase = + 103%
- A* - C (66 - 91%) percentage increase =  + 40%

Year 11 Triple, Core, Additional GCSE results were 88% A* - C

- A* - C increase of 24 % or percentage increase = + 38%
2005- 2008 KS3 Comparison

- CCS has now run for two years in year 7 and 8. Comparative data from 2005 (Prior to CCS) and 2008 were made with year 8 results and performance.

  - Numbers of students on Level 5(+) = 20% increase
  - Numbers of students on Level 6(+) = 144% increase
  - Numbers of students on Level 7(+) = 1,150% increase

- KS3 course reduced from 3 years teaching to 2 years
- SAT’s Exam now taken in year 8. One year early.
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