



## WP2 Case Study: RSA Academy and Caparo

<b>General Information on VET Organisation</b>
Institution: RSA Academy
Type of Institution: 11-18 Academy (Secondary sector)
Locality and Country: Tipton, West Midlands, UK
Course name and level: Case study is relevant to 2 courses. BTEC Level 3 Engineering. Post-16 vocational qualification Product Design Level 3. Post-16 vocational qualification (Part of International Baccalaureate Career-Related Certificate course)
Target Group of Course/Curriculum Vocational learners
Pedagogy used? Vocational courses. Consist of a combination of theory and practical elements which are determined by course units.
Is the course accredited? Yes. BTEC and IB qualifications.
Statistical Information (if relevant) BTEC Engineering has an average of 20 students per year. IBCC Product Design has an average of 2 to 10 students per year. 100% pass rates on both courses are achieved.
<b>General Information on Business involved</b>
Name of Business: Caparo Industries (Manufacturing, engineering, automotive, aerospace)
Number of employees: 2050 across the whole business
Area of involved Business: Midlands

How is the Business involved in the curriculum? In various ways – please see detailed description below.
Engagement profile of business: In what way(s) does the business cooperate In various ways – please see detailed description below.

The BTEC Engineering course requires some form of industrial link. This has been achieved by RSA Academy in a number of ways. For example, for the Health and Safety module students have visited a range of companies to see what the issues are there, completed a risk assessment example and shown real hazards. This aims to put the theory into practice for the students and give them a realistic insight into a real organisation.

External competitions are engaged with and often link to the Engineering Education Scheme. As part of these, a number of businesses have been engaged with, among them Caparo. Students are also taken on a range of industrial visits to different sectors.

Caparo and RSA Academy work together to offer students a range of opportunities.

#### Apprenticeships scheme

Caparo were interested in recruiting apprentices. RSA Academy students have enrichment time during the week and used this time to carry out an industrial placement at Caparo. Four students started on a placement with 2 completing the whole 8 month placement, one in the tool room and the other in the maintenance department. As a result both students have been offered apprenticeships with Caparo.

#### Health and Safety modules

A specific example of how Caparo have supported and influenced the curriculum is in relation to the development of Health and Safety modules which they have helped to write and deliver. It was vital to match the relevant business elements with the accreditation requirements and academic rigour. This was achieved through a number of meetings and visits and discussions regarding which elements would be most appropriate. One example is risk assessments, where students worked with the business to carry these out. For the school, they see this type of activity as the whole point of vocational learning: theory in the classroom and then putting it in action across a range of sectors.

#### Engineering Education Scheme

Caparo have invested in this scheme and work with RSA Academy to present the issues or problems that students have to solve. They also provide a mentor for the

students who supports the students with their designs and testing.

The relationship and activities between RSA Academy and Caparo include elements of regular feedback and evaluation. This is through written work from students, regular feedback from Caparo and reviewing of activities and processes. In necessary, changes are made. Flexibility is very important and the relationship is an informal arrangement. It is clear that working with the RSA Academy is a big commitment from Caparo and as a result it has to be accepted that things will, and do, change as a result of dealing with a real business.

A key challenge, from the school perspective, of working closely with businesses in this way is maintaining the ongoing relationship and commitment from businesses. Such arrangements often rely on personal relationships and it is also important to have access to networks and contacts to get started. RSA Academy has found businesses through local networks including STEMNET and through school staff contacts and parents.

For Caparo the challenges are in relation to resources and capacity, and the changed responsibilities for staff that such work brings. There are also Health and Safety issues that need to be addressed in relation to working with under 18s and having students on industrial sites. Support for this has been sourced from the local authority EBP (Education Business Partnership) team.

The relationship between Caparo and RSA Academy is fluid and flexible, and regular discussion take place regarding how to progress and develop the links.

The successes and benefits for the school of working with businesses are wide and far-reaching. It often achieves a full cycle of education from school to career and supports the notion of Lifelong Learning. It prepares students for employment and helps them to secure jobs that they want. It also changes their perceptions and opinions of engineering as a career and increases aspiration. Many students start to consider university and apprenticeships as options, and the value of apprenticeships is recognised as a work based route to a chosen career. Students are also very engaged and get the opportunity to meet new people.

There is, however, the need, and desire, to attract more girls onto the courses and this is being addressed through demonstrating the wide range of possible career options available.

Teaching staff have seen key differences between the original curriculum and the one influenced by, and involving business. There is a renewed interest and enthusiasm for the subjects and students are actively involved in seeing how industry works and are involved in industry based projects. These are fantastic experiences and relevant and useful for their careers and university applications, and make the students stand out from others. They also gain the rich experience of engaging with external contacts. For staff, working with businesses in these ways helps to keep teaching up to date and is also interesting and rewarding for staff and the school.

From Caparo's perspective a number of successes and benefits have been seen. Recruitment costs, processes and time is reduced and they are able to 'grow their own' staff through placements and apprenticeships. The students are engaged in real vocational progression and receive appropriate training. It also, in part, addresses the issue of an increasingly ageing workforce. Their brand is seen by wider audiences and there are benefits from positive public relations. It also gives them the opportunity to direct the progression of students and to ensure that the curriculum meets, and is responsive to, the needs of the business. For example, areas of the business use very specific software which students on placements can be trained in in preparation for other roles. There are plans to expand provision within other sectors of Caparo and to more extensively influence the curriculum so that students meet the needs of the business. They are also developing a new initiative, 'Talent Partnering' which involves a range of activities including engaging with local schools and colleges, presentations to students and bringing students into the business for visits and work placements.

ICT is a vital part of how students study both the BTEC Engineering and Product Design courses. Both courses are online and content includes all the guidance, units, PowerPoints and assignments. Students and staff are able to carry out a range of activities including uploading documents and assignments, feedback and marking. The system also facilitates accurate tracking and can be accessed remotely. There are plans in place for all students to be given a Chrome book. Both courses also include a high level of ICT in relation to topics and content.

### Student Perspective

Four students were interviewed to gain their perspectives in relation to the courses and working with business. They were all male and in Year 12 (aged 16/17). The students reported that they have to spend a specific amount of time working with business. In one 10 hour block they were entered in a national competition which involved them being given a real organisational problem to solve. The students had to design a solution with support from the organisation and present it to the project board directors. They also visited Loughborough University to make a prototype of their design. The students found the experience really useful and stated that it gave them a realistic experience of what working in industry is like. One student mentioned that during the competition they had to adhere to the exact processes that the engineering company would have to go through (research, customer research etc.). This helped him to decide on his future career as he had a realistic experience. The students also enjoyed meeting new people and found presenting to the directors a good, though daunting, experience. The students could see real benefits from their experiences working with industry including: insight into the real world; experience on CV; realistic experience and skills development; understanding of a real problem and brief; meeting customer needs; preparation for university and work. They also reported that the practical elements helped them in the classroom and in theoretical work as they could apply what they had learnt. Using the online ICT based learning environment was also seen as a positive as it enabled them to access the work and requirements at home, track their progress and access feedback from their teachers.

### Useful Links

Caparo [www.caparo.com](http://www.caparo.com)

RSA Academy <http://www.rsaacademy.org/>

International Baccalaureate Career Related Certificate <http://ibo.org/ibcc/>

BTEC Engineering

<http://www.edexcel.com/quals/nationals10/eng/Pages/default.aspx>

Engineering Education Scheme <http://www.etrust.org.uk/node/75>