All reports originally written by Aimhigher practitioners for the LIFE Newsletter

Greenpower Car Engineering Apprentices Summer School

The third Aimhigher Summer School aimed specifically at Engineering Apprentices, hosted by Weymouth College was held in July 2006. Apprentices represent the most difficult to reach vocational engineering grouping when it comes to encouraging them to consider Higher Education (H.E.). The idea of a Summer School for apprentices was first conceived and funded 3 years previously, with a target set of putting 30 engineering apprentices through an 'awareness and aspiration raising activity' designed to promote H.E. The idea was conceived, to provide an H.E. Level project that was stimulating, enjoyable and fun, but of course had a serious purpose - to expose the apprentices to University life and what study at HE Level might actually involve. The key to the success of this initiative has been in successfully tapping into the strong partnerships and links colleges and training providers already had with their local/regional employers and their apprentices - the necessary mutual trust and guidance being long established. In all this intervention has been an outstanding success that it is hoped will be continued. The success is due mainly to the formation of a strong partnership, those involved are fully committed to continuing and participating on this project in future years should it continue to be offered.

Aimhigher are supporting the development and expansion of the 'Greenpower Somerset and Dorset' initiative along with a number of partnership organisations from the two counties. 'Greenpower' is a national initiative that sets out to present engineering and technology to children still at school as being an exciting and worthwhile activity to take forward into life as a career. To introduce young people to wide range of engineering principles the teams are tasked with designing, constructing, testing and finally racing their cars competitively as part of a national initiative. The National finals take place at the famous Goodwood Racing Circuit in Sussex in October 2006.

Most of the school teams are composed of between 8-12 young people (8-16 year-olds), who get together to form after-school clubs. In 2006 over 30 schools from Somerset and Dorset completed their ecological 'Green Powered' (Electric) cars between May and September and successfully raced them in the two Regional Heats held at the Sparkford Motor Museum (South Somerset) on 23/24th September 2006. Six teams from the two counties went forward to the finals in October, making their entry the strongest from any region in the UK.

As well as supporting this initiative financially and helping on the race-days, Aimhigher was actively involved in raising awareness of engineering career opportunities and progression routes into HE. A full evaluation was conducted and from this it emerged that the Greenpower Challenge was a very successful initiative, with 94% of the students stating that the activity had significantly raised their interest in engineering. All of the students indicated that they had enjoyed participating and 65% of the students who had 'not considered going to university' before participating in the initiative, stated that they would now reconsider their decision. Furthermore, 100% of the students who had been 'unsure' about going to university before they attended the event, stated that they would now reconsider going to university in the future.

Engineering Apprentices face the Green-powered Car Challenge at Yeovil

Yeovil College have also hosted the summer school. Of the thirty Engineering Apprentices attending, fifteen were on the new `Young Apprentice' scheme, recently finishing the first year of the two-year course. These apprentices are Year 10 students from Wadham, Stanchester, Preston, Westfield and Buckler's Mead schools. The other fifteen apprentices were employed by local engineering and manufacturing companies and studying at the College.

The summer school provides an intensive higher education level activity – to design, build, construct and then race a `green-powered' car in just four days, bringing together a wide range of engineering skills. Good planning, communication, motivation and teamwork is required for the engineers to communicate their ideas. The fifth day is a higher education awareness raising visit to Bournemouth University's Design, Engineering and Computing facility. While they were there, the students designed, and "rendered" (realistic image techniques) an alloy car wheel using state-of-the-art computer aided design software and then had a demonstration of their wheel being automatically manufactured using the very latest computerised techniques.

Speaking at the event, Brian Duke, Engineering Programme Manager for Aimhigher, said: "The Green-powered Car Challenge is a great way of allowing the apprentices to learn new skills and find out about their options. The aim of the project is to provide students with a real higher education experience. It aims to be fun, stimulating and competitive – and engineering should be just that."