

2030 Vision: Education and Skills

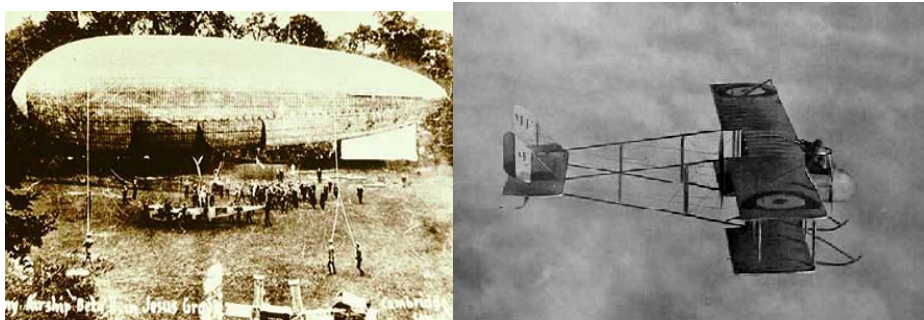
Introductory talk by Rob Butler (Marshall Aerospace)

These are my own views, not necessarily those of Marshall Aerospace



During my time at Marshall Aerospace I have recruited many people into the Company across a wide range of skills and ages. However no other recruitment gives me more pleasure and satisfaction than offering positions to young people that will hopefully develop a promising career in the aerospace industry.

This industry is rewarding but challenging, interesting and fast moving.





An employer's needs are sometimes vast and complex. Configuring education to meet with those needs is an enormous challenge. I would need a lot more than 15 minutes to present an employer's view on those issues.


Marshall recruits from all sectors of the education system, but for today I want to generate some discussion amongst you specifically, on a widening skills gap that our core business activities heavily rely on.

I am going to talk briefly to you about our apprentice recruitment process findings for the apprentice intake recently recruited for 2011/12.

'2030 Vision' Preparatory meeting 14th March 2011 identified that:

- There is a constant tension between generic and specific skills. Employers complain that young people get qualifications instead of skills.

- What is needed is the ability to think and to solve problems, and the attitude to do these things.



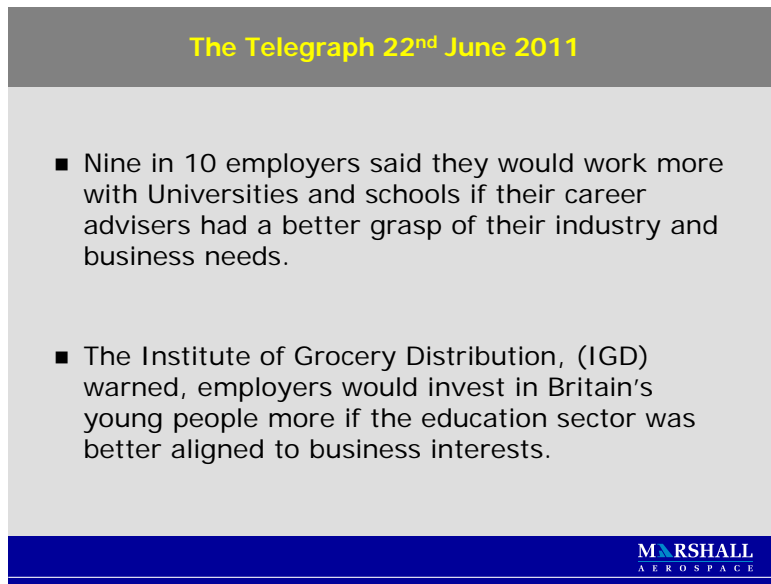
A '2030 Vision' preparatory meeting on 14th March identified that amongst other things:

- There is a constant tension between generic and specific skills. Employers complain that young people get qualifications instead of skills.

It also identified that people:

- Need the ability to think and to solve problems, and the attitude to do these things.

A further reference I would like to use is from the Telegraph on the 22nd June 2011:



The Telegraph 22nd June 2011

- Nine in 10 employers said they would work more with Universities and schools if their career advisers had a better grasp of their industry and business needs.
- The Institute of Grocery Distribution, (IGD) warned, employers would invest in Britain's young people more if the education sector was better aligned to business interests.

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At Marshall Aerospace we have been providing the Marshall Apprenticeship scheme since the 1960's without a break in the programme.

Providing aerospace engineers since the 1960's



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During the last few months we have reviewed over 200 applications for 11 apprentice positions. We have taken care to test, interview and select the most appropriate applicants to join our team.

We try to select the right people that we think will help us in the future to maintain our world class position in the aerospace industry and to assist us moving forward with this fast moving technology.

There are two routes of study within our apprenticeship scheme. One route is the NVQ level 3 and BTEC ONC qualification over 4 years. This route delivers a qualified aircraft fitter into the hangar environment and this also supports continued study and qualifications to achieve licensed engineer status.

The second route is the Technician Apprentice role employed within the Aerospace Design Team. The qualification is an NVQ level 3 and a BTEC HND, also over a 4 year period. The Technician Apprentice can progress to Chartered Engineer status once qualified.

Updated modern workshop facilities.



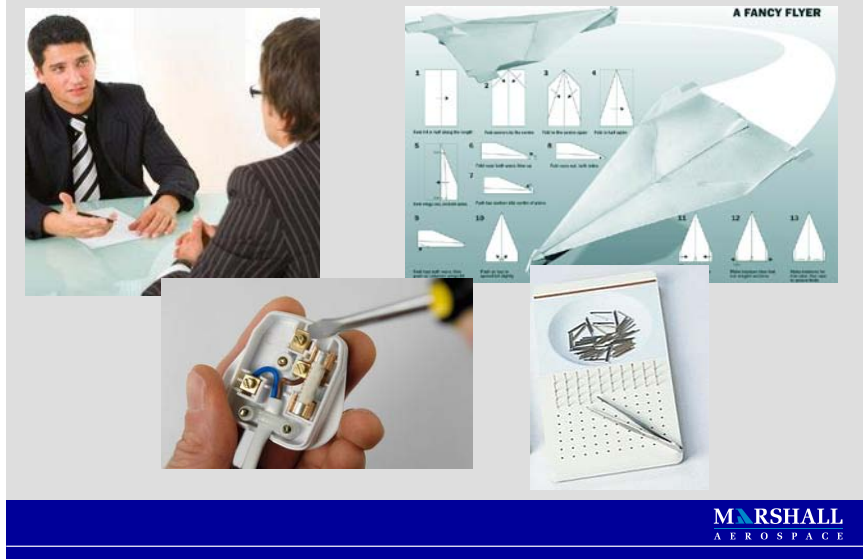
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This year has witnessed a sudden shift in the level of academic achievement by our applicants. This has resulted in unusually higher scores attained in the aptitude testing of those applicants. We initially found this positive shift quite exciting and initially anticipated recruiting some very high achievers that would go on to develop well at Marshall.

Was this an indicator that paid apprenticeships are becoming a better option for those that would normally go on to university but do not want the burden of high tuition fees?

The interview process however, soon brought us back down to earth as we discovered that basic engineering problem solving and manual dexterity skills were poorer in relation to those with higher academic results.

Testing Dexterity



Those that displayed the highest levels of problem solving and dexterity skills were those that had achieved average to above average GCSE's in relevant subjects. The occasional high academic achiever that did happen to score highly across the range of interviews and tests were put forward for selection for the HND, Design route.

We have found that successful future employees are usually those that:

- Can demonstrate a keen interest in aviation and engineering. We are not necessarily looking for 'aircraft spotters'
- People that have an understanding of aircraft.
- Those that can demonstrate some experience in a 'hands on' project. This may be something as simple as repairing bicycles or perhaps a school project.

During the interview process we try to determine their level of interest and knowledge into aviation. Where that knowledge is very limited, we discuss with them their engineering knowledge associated with other disciplines.

However, in recent years we have found that the candidate's knowledge is becoming more and more dilute. This, despite the fact that resources are more readily available to carry out research and to get technical and business information.

Hands on experience does appear to be less evident amongst applicants.

Is this attributed to a decrease in work experience opportunities with employers?

Work experience is an excellent method of exposing students to industry and also career planning. However these opportunities are becoming scarce as H

& S restrictions and the potential risk of liability faced by employers make the risk averse option more popular, i.e. do not offer work experience.

Successful applicants however were able to talk to us about engineering projects carried out that ranged from simple engineering tasks to motor vehicle maintenance or electronic projects and experiences.

They had usually researched aviation including basic theory of flight, and were able to think through and talk about a problem presented to them.

They had practical skills and ability!

The successful applicants were also able to discuss and show an understanding of the continuing education and training programme that they would embark on with the Marshall.

During the interview process we try to determine the driver for their career choice. We ask all of our candidates what careers advice they have received and where from.

The response to this question is that they are encouraged by teachers to study further, go to college or university depending on their academic achievements. Not one single person was able to reflect on careers advice that directed them into considering or applying for a specific career.

- Is this because teaching staff are perhaps not best placed to advice on careers in industry?
- Should the responsibility of providing careers advice sit with somebody that has spent their entire career in education?

In previous years applicants have responded with the experiences they have had with 'Connexions'

The applicants often responded with cynicism about their experience with that organisation. Maybe it is appropriate that 'Connexions' have now been disconnected.

The Connexions website has now been replaced with the www.direct.gov.uk website. The first question is; 'Looking for a job'? Search the Jobcentre Plus database or look for volunteering opportunities in your area.

How inspiring must that be?

There is further information about gaining that 'Dream Career' There is a mention about turning those hobbies/interests and likes into a future career.

Whilst that may be nice, hobbies and interests may not offer real career prospects.

Practical Skills essential for the success of our business.



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In a local to Cambridge village school, all of the year 11 pupils are going on to further education. Only one pupil is going into industry and he is going into his fathers business.

An 'Employer Needs' a range of appropriate skills and abilities to support its business. Practical skills and abilities that are underpinned by appropriate academic achievements.