

# Industry, Govt and institutions must unite

By JAMES ABBOTT

The strong Australian dollar and continued fierce competition from Asia will place added pressure on the Australian manufacturing sector this year.

Now more than ever it is essential for government, industry and higher education institutions to unite to promote local manufacturing.

Such an alliance not only yields rewards for major manufacturers involved industries like defence and automotive, it also has spin-off effects for others.

To grow we must create an innovative culture to give industry some serious momentum. According to the Society of Manufacturing Engineers (SME), manufacturing drives more innovation than any other sector of the economy.

A healthy manufacturing sector and innovation are the two most critical determinants of our standard of living – and they are related directly.

The very essence of innovation is to produce more product with less resources. This means we must invest in new technology to boost GDP and in turn, create jobs.

A high degree of innovative thinking and capital investment is required to succeed rather than increased labour and "grunt" power.

So how can the manufacturing industry foster such a culture? One way is to encourage more technical demonstrations and presentations as well as more formal education and business development programs. Industry associations can conduct a series of informal demonstrations, including product and technical hand-on demonstrations.



*New technology ... components machined using a multi-axis CNC lathe*

Industry must maintain and strengthen its links with higher education institutions like TAFE and universities.

In its policy on manufacturing Engineers Australia stresses: "a strong manufacturing sector requires a high level of innovation and integrated programs between industry, government and the higher education sector."

And when it comes to employment, it is vital for industry to attract the "right" school leavers. High school students should be encouraged to consider a career in engineering and manufacturing.

The image of manufacturing is rapidly changing. Industry was once perceived as a "grimy, and

greasy" career with little limited opportunities for advancement. This misconception prevented parents from encouraging their children to pursue manufacturing careers.

But manufacturing is now seen as a clean, highly automated and technical.

It is this image that should be promoted to senior school students.

In the US, the National Centre for Manufacturing Education in Dayton, Ohio (with support from the SME) has created a novel portal called [careerME.org](http://careerME.org).

This site provides current, positive and accurate information about careers in manufacturing. The SME Education Foundation has also created

the website [manufacturingiscool.com](http://manufacturingiscool.com) for younger students interested in manufacturing.

Companies can also play their part.

For example, Boeing Defence Australia supports the Gateway Schools Program, which is a partnership initiative between the Qld Government and industry bodies to create pathways for Qld high school students to enter into careers within the aerospace industry.

At present, 17 schools across the state are involved in the project, and 24 schools offer the Aerospace Studies curriculum to more than 1200 Year 11 and 12 students.

Along with providing relevant education programs, Government needs to implement other long term and short-term strategies for growth.

According to Engineers Australia, Government needs to articulate a vision for the sector. Such a policy needs to: identify areas of competitive advantage, identify the level of sector growth needed, and identify barriers to growth. The Government needs to financially support innovation rather than just offer rebates for employment.

Government, industry and education working together can create a bright future for manufacturing in Australia.

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