Dear Principal,

You may have recently been informed about the STEM imperative in Australian education and we would like to offer some assistance with this exciting and challenging area.

Many schools are seeking to find effective models for STEM delivery within their existing structures. Fortunately most schools already have established and engaging STEM learning areas in their schools – Design and Technology subjects like Product Design, Textiles and Systems Engineering.

Design and Technology-related subjects have the scope and space to create and deliver problem-based learning projects that can be easily tailored towards an explicit STEM focus. Through our advocacy, the value of our members’ contribution to STEM learning has already been acknowledged by most universities in Victoria, who have now given VCE Systems Engineering bonus subject status for entry to their engineering courses.

DATTA Vic has also been promoting a STEM project model, based on the design process, to our members who have attended STEM information and brainstorming sessions.

By bringing together some of your Design and Technology, Science and Mathematics teachers to create STEM projects following the design process, you will be able to effectively harness the talent and expertise you currently have in your teaching cohort.

Most STEM projects can be delivered within a normal Design and Technology lesson. Occasional assistance from Science and Maths teachers to teach key components may also assist in effective and engaging delivery of content.

Using the design process as a model for STEM projects, you will also be contributing greatly to developing the creative problem solvers that our future workforce and economy will need in the coming years.

There are startling and credible predictions that more than five million Australian jobs will simply disappear in the next 15 year, as a result of new technologies. That's 40% of the jobs that exist in Australia today.

"What’s happening is the same thing that happened to blue collar work in the seventies, eighties and nineties – it is going to happen to white collar work...People need to start understanding the impact that it’s going to have on them." Management Consultant – source ABC.

One further way we believe you can support your Design and Technology teachers to create and deliver engaging and valuable STEM based projects and lessons is to give them more time to collaborate, prepare and refine their lessons. It is our association’s belief that all schools with Technology departments should consider employing assistants who can focus on tasks like ordering, cutting, maintaining machinery and ensuring high OH&S workshop standards and documentation. This investment, if not already in place at your school, will not only make the Design and Technology-related subjects safer and more efficient, it will allow your school to further capitalise on the creativity and experience of your existing teachers.

We would like to be active partners in your STEM initiatives so please ensure that your school is an ongoing member of DATTA Vic so that they can benefit from the free member resources, OH&S support, curriculum advice and many professional leaning opportunities at our regular workshops and conferences.

Good luck on your STEM journey and please contact us if we can be of further assistance.

Yours Sincerely

Peter Murphy
President DATTA Vic