

The Association of Professional Engineers, Scientists & Managers, Australia

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1 July 2005

The Secretary
Inquiry into Teacher Education
Standing Committee on Education &
Vocational Training
Parliament House
CANBERRA ACT 2600

evt.reps@aph.gov.au

Dear Sir/Madam,

RE: INQUIRY INTO TEACHER EDUCATION

Please find attached a submission from APESMA in relation to the above inquiry.

Yours faithfully

A handwritten signature in black ink, appearing to read 'John Vines', with a horizontal line underneath.

John Vines
Chief Executive.



ASSOCIATION OF PROFESSIONAL ENGINEERS, SCIENTISTS & MANAGERS, AUSTRALIA

SUBMISSION TO THE STANDING COMMITTEE ON EDUCATION AND VOCATIONAL TRAINING - INQUIRY INTO TEACHER EDUCATION.

APESMA is concerned at the declining demand from school leavers for places in science and engineering courses at Australia's universities. APESMA believes that one of the factors contributing to this decline is related to the shortage of qualified Maths and Science Teachers in Australia's secondary schools. This submission proposes an initiative to undertake a pilot program to retrain Engineers, Scientists and IT Professionals as Maths and Science Teachers.

Despite the current tight labour market for Engineers in Australia, APESMA believes that there are at least 2000 - 4000 qualified Engineers who are unable to obtain employment as Professional Engineers. There are similar numbers of persons with university level information technology and related qualifications who are unable to obtain employment in the IT field, and even larger numbers of persons with science qualifications who are unable to obtain employment in science related occupations. As such, APESMA believes that there is a significant pool of potential Maths and Science Teachers who have qualifications in engineering, science or IT, and who may be interested in transferring to a career in teaching.

While a significant proportion of the persons in the above categories are over the age of 45 and are experiencing significant difficulties in gaining employment in their profession following retrenchment etc, there are also a significant number of professionals in these categories who would be interested in the possibility of moving into a teaching role.

APESMA acknowledges that only a relatively small proportion of those persons referred to above may be interested in and suitable for a career in teaching, however we believe that this figure is in the order of several hundred. Accordingly, a program to retrain these professionals as teachers could have a significant impact on the availability of qualified Maths and Science Teachers in Australia's secondary schools.

A major advantage of such a program would be to introduce into the school system persons who have an appreciation of the application of maths and science in the workplace, and therefore may be able to more effectively engender a degree of interest, enthusiasm and relevance for the study of maths and science in secondary schools in Australia. If such an outcome were achieved, it would be of major benefit to Australia.

It is acknowledged that some state governments have sought to provide opportunities for these experienced professionals to retrain as teachers, however, in APESMA's view, the training programs which have been developed do not take into account personal circumstances nor do they recognise the capabilities which these persons have acquired as a result of their work experience. In other words, APESMA believes that these attributes need to be factored into the development of a training program so as to maximise participation, minimise the financial cost to the individuals and recognise the fact that the individuals concerned probably have a greater capacity to absorb information than recent graduates. As such, APESMA believes that an intensive 26 week program which includes classroom based work experience would be sufficient to provide the necessary teacher training to enable these persons to be effective teachers. An intensive 26 week program would equate to the current one year Dip Ed program.

APESMA proposes that the Federal Government should provide funding for a demonstration pilot program and initial cohort of 60 Maths and Science Teachers from persons who have work experience and who have completed undergraduate degrees in disciplines which have a basis in Maths and Science. This funding could be used to provide two programs, one in Victoria and one in NSW, and for the development and approval of appropriate curriculum to enable the training course to be delivered over an intensive 26 week period.

John Vines
Chief Executive