



Australian Government

Chief Scientist

MEDIA RELEASE

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HELPING TEACHERS TO INSPIRE STUDENTS

A paper from the Office of the Chief Scientist highlights the crucial role of primary school teachers in lifting Australia's performance in science, technology and mathematics.

The paper argues that the prestige and preparedness of school teachers needs to be raised and that STEM* teachers need to be given more support, including through leadership from principals.

“In a rapidly changing world, increasingly dependent on science, technology and mathematics, we need to be producing students with a high level of literacy in these areas – the keys to the future,” Australia's Chief Scientist Professor Ian Chubb said.

“It all starts in primary schools. We must ensure students have a strong interest in STEM.

“To achieve this, we need to attract entrants to teaching programs with an emphasis on STEM. Then we need to prepare teachers properly, so they can excel in the classroom. And we must support them when they are there.

“We need a system where teachers in every school are supported by specialist STEM teachers and there is strong professional development for all teachers.”

The paper comes at a critical time with the Federal Government releasing the National Innovation and Science Agenda this week. The Agenda includes an initiative to support primary school teachers to implement a new digital technologies curriculum, helping prepare young Australians for 21st century jobs.

It also notes the Federal Government has announced that all future primary pre-service teachers will be equipped with at least one subject specialisation, including a priority on science and mathematics.

The paper emphasises that only a minority of Australia's primary school teachers have an educational background in STEM. Teachers surveyed in 2014 said digital technology was a particular source of anxiety, with many teachers unaware of the need to teach it, or how to teach it well.

A 2011 survey found only 16 per cent of Year 4 students were taught science by a teacher who specialised or majored in science and only 20 per cent had a teacher who specialised in mathematics, the paper says.

System-wide leadership is required to deliver world-class STEM education, the paper says and proposes the creation of a STEM Education Leadership Taskforce that will report to Ministers.

The paper, titled *Transforming STEM teaching in Australian primary schools: everybody's business*, is available at www.chiefscientist.gov.au.

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*The term STEM in the paper refers to the subjects taught in Australian primary schools: science, mathematics and technology (which can include engineering).