

## **MEDIA RELEASE**

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## Tertiary education sector needs to re-think how it prepares students for the jobs of the future

Universities, TAFEs and polytechnics will all need to re-examine how they educate and equip students for the coming wave of industrialisation, centred on artificial intelligence and robotics, according to a leading global education expert.

Dr David Finegold, President of Chatham University in Pittsburgh, United States, told the World Federation of Colleges and Polytechnics Congress in Melbourne that there was a big question over whether the education system is adequately preparing people for a new era of work.

He said that while some 60% of tasks could be done better by computers, that didn't necessarily mean that 60% of jobs would disappear, "because jobs comprise a complex bundle of tasks."

"It does mean that a lot of routine tasks will be automated away so that people will be able to concentrate on higher value tasks.

"A lot of the jobs that will be most at risk are the highest skilled university-level jobs such as routine computer programmers, lawyers, doctors and middle managers.

"These will all be at more at risk than plumbers and electricians because those jobs are much harder to automate," he said.

He told the conference that the impact of advances in artificial intelligence would have major implications for education, occupational structure and the distribution of wealth.

A common question about the current wave of technological change, he says, is "whether there is anything different this time around?"

He said in earlier waves of industrial transformation, there was the presumption that if people shifted up the education ladder, through university or colleges, they would be better off.

"This time around I don't think that's going to be the case.

"We've seen huge disruption in university educated jobs such as lawyers, doctors and journalists, where jobs have been greatly reduced in quantity.

"I think the colleges and polytechnics are actually very well positioned because the hardest jobs to automate out of existence are those that combine manual dexterity with deep understanding," he said"

He predicted that as artificial intelligence evolves, at least three broad types of occupations will remain in demand.

At the high skill end, this includes creatives, system integrators, and project managers; at the mid-level, it includes trades and technicians; and at the low skill end, it includes caring professions, health and human services.

He said the role of higher education was to prepare people with skills for jobs, "even though we don't know what those jobs will look like in ten or twenty years."

"These are the skills that will help people succeed in the future – critical thinking, problem solving, cross cultural communication and lifelong learning.

"I know these things can slip into rhetoric but I think they are terribly important skills to develop if we are going to see our students succeed."

See the World Congress website.

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TAFE Directors Australia is the peak national body representing 28 TAFE institutes, including six dual sector universities with TAFE divisions.