

Future workers will only need STEM skills GET REAL!

According to the National Skills Commission (2020), "75% of employers considered employability skills to be as important, if not more important, than technical skills".

“The seven top characteristics of success at Google are all soft skills.”
(Strauss, 2017)

- Soft skills made up more than half of the top 10 skills most demanded in ICT job postings in 2020:
- Communication skills (42%)
 - Teamwork/Collaboration (23%)
 - Problem-solving (18%)
 - Planning (17%)
 - Structured query language (14%)
 - Customer service (13%)
 - Project management (12%)
 - Troubleshooting (11%)
 - Writing (11%)
 - Java (10%).
- (Deloitte Access Economics, 2021)

Technology, automation and AI:
According to a 2019 McKinsey report, it is estimated that "25-46% of current work activities in Australia could be automated by 2030, helping to drive a renaissance in productivity, personal income and economic growth".
(Taylor et al., 2019)

Automation is reshaping work and the skills demanded for work:

“Jobs will increasingly need us to hands (manual labour) to work of the head (cognitive tasks), towards work of the heart.”
There will be a shift from work of the hands (manual labour) to work of the head (cognitive tasks), towards work of the heart.
“Jobs will increasingly need us to conduct 'work of the heart'. Robots are learning to understand and mimic human tone, but are less able to exercise emotional judgement or champion professional ethics.”
(Deloitte Insights, 2019)

Deloitte Access Economics (2019) predicts that "soft-skill intensive occupations will account for two-thirds of all jobs by 2030. Work of the future will see technology augmenting human capability and will allow individuals to focus on higher value-added tasks."

“The demand for advanced cognitive skills and narrow job-specific skills is increasing, whereas the demand for sociobehavioral skills is waning. Meanwhile, the skills associated with 'adaptability' are increasingly in demand. This combination of specific cognitive skills (critical thinking and problem-solving) and sociobehavioral skills (creativity and curiosity) is transferable across jobs.”
(The World Bank, 2019)

“The demand for workers who can undertake nonroutine cognitive tasks, such as high-skilled research, is increasing.”
(The World Bank, 2019)



“The importance of characteristics will more than double over the next two decades as workers shift into tasks that require uniquely human skills such as empathy, leadership, team work and coordination. Over their lifetime, Australians will need to spend an additional 3.5 hours per week developing these uniquely human skills.”
(AlphaBeta, 2019)

Silicon Valley wants leaders who are storytellers.

According to AlphaBeta’s (2019) report for Google Australia, in the future, the most valuable skills will be distinctly human characteristics.

“Students need what computers cannot provide: inference, intuition, and imagination.”
(Condee, 2016)

“It’s easier to train a machine to understand mathematical rules (knowledge) than it is to teach it to drive (an ability) or be creative (a characteristic). In particular, complex and context-dependent human characteristics like empathy or leadership are challenging to translate into a language that a machine can understand. This means that any skill set comprising even a small share of tacit capability will remain the domain of humans because tacit skills cannot be codified.”
(AlphaBeta for Google Australia, 2019)

“Technology alone is not enough—it’s technology married with liberal arts, married with the humanities, that yields us the results that make our heart sing.”
(Steve Jobs, 2011)

“The soft skills that emerged from humanities can help give us answers on some of the most complex questions and problems in science and technology. Studies within humanities teach students to evaluate complex and sometimes flawed or fragmentary information by skeptically and carefully considering evidence and considering more than one side of every question. By comparing information with different points of view and using critical and creative thinking, students are taught to make a subjective and effective decision, which is one of the key skills of the 21st century job market.”
(Pavlica et al., 2020)

Skilling-up for an AI-powered world involves more than science, technology, engineering and maths:

“As computers behave more like humans, the social sciences and humanities will become even more important. Languages, art, history, economics, ethics, philosophy, psychology and human development courses can teach critical, philosophical and ethics-based skills that will be instrumental in the development and management of AI solutions.”
(Brad Smith, Microsoft President and Chief Legal Officer, and Harry Shum, Executive Vice President of Microsoft AI and Research Group; Shum & Smith, 2018; see also Doidge & Doyle, 2020; Forde, 2020)

“To be truly innovative, scientists must consider how their work will affect the world and its inhabitants.”
(Pavlica et al., 2020)