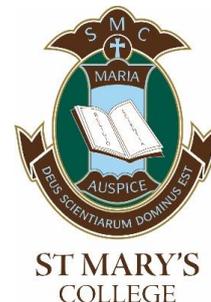


## MEDIA RELEASE

Tuesday 19 February 2019



### **Student's invention takes weight off kids' shoulders.**

With the new school year now back in full swing, St Mary's College students could soon be carrying a lighter load thanks to the invention of a Year 11 student whose device ensures backpacks' weight meet safety guidelines.

Lucy Eade said seeing students struggle with heavy backpacks inspired her to create 'I've got you're your back: Safety Backpack' for an independent Science Engineering Mathematics and Technology (STEM) project.

"There are many studies out there that prove children carrying backpacks that are more than 10 per-cent of their body weight can receive serious injuries that not only affect their current health, but also their long-term health into adulthood.

"I surveyed students from St Mary's and discovered 87 per-cent of them carried backpacks more than 10 per-cent of their own body weight," Ms Eade said.

Ms Eade said her system, which used an electronic prototyping platform, allowed students to test their backpacks with either the purpose-built LCD board displaying the words 'safe weight' or a LED light illuminating when a bag's too heavy.

"Not a lot of people are aware of the damage that can occur to students who carry heavy bags, so it's important to educate students and help them to avoid this risk," Ms Eade said.

Having written the device's code, creating hardware and an LCD extension system, Ms Eade said the next challenge will be to make a wireless model that could be placed into students' lockers so they can easily weigh their bags before they left school.

St Mary's Principal Helen Spencer said Ms Eade's project allowed students to see how STEM learnings were rolled-out from theory through to real-world practice.

"Our science program, and dedicated teachers, means that students are capable of tackling and solving issues both inside and beyond the classroom," she said.

Ms Eade's 'Safety Backpack' was recently selected as one of 26 finalists from around the country in one of Australia's most prestigious STEM competitions, the BPH Foundation Science and Engineering Awards.

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*'I've got your back: Safety Backpack' video can be viewed here: <https://vimeo.com/314145153>*

*Photo and interview opportunity can be arranged.*

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