## Smart design benefits children

David Hobbs and Max Hughes with Orbys

A Flinders staff member and alumnus has played a leading role in developing 'Orby' – a novel computer game controller that enables children with disabilities to play computer games. The invention has won a prestigious state prize from the Design Institute of Australia.

The concept of an easy-to-use, accessible controller was the brainchild of Flinders University lecturer David Hobbs, who initiated a collaborative project between Flinders University and the University of South Australia to create a working prototype. Mr Hobbs holds a Bachelor of Science and Bachelor of Engineering (Biomedical) from Flinders, and has won several awards for his haptic gaming technologies for children with disabilities. Also key to the project was industrial design graduate Max Hughes, who initiated the project as a student before being employed by Flinders University.

Under the supervision of Mr Hobbs, the aim of the project was to design a computer game controller that children with limited hand function could use, meaning they could participate in a mainstream, 'normal' and socially-binding activity.

The controller won a silver award in the object category of the 2013 Design Institute of Australia SA Awards, announced in late 2013. 'Orby' is currently part of a clinical trial targeted specifically at children with cerebral palsy, with the results yet to be determined.

The controller was 3D printed and manufactured locally by advanced manufacturing company Ellex Precise, who specialise in assisting clients to commercialise their medical device intellectual property.

The 'Orby' controller was developed through a collaborative project between Flinders University, the University of South Australia and the Women's and Children's Health Network, and funded by the Channel 7 Children's Research Foundation.

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