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# An ideas generation tool demonstrated through multi-disciplinary development of a Wheelchair Stability Assessment System

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## introduction

This poster will illustrate the use of the **CUbe** as a design tool employed in the development of a new load cell based wheelchair stability assessment system (Wheel-SAS). The development of this system is highly multi-disciplinary involving designers, engineers, computer scientists and psychologists.

The **CUbe** is a design tool that can be used to generate ideas in a more exciting and engaging manner than traditional methods. This poster will demonstrate how the technique is employed and how it has been used to bring together a multi-disciplinary development team and work across hierarchical barriers.

## technique

**1** cardboard **CUbe**

**4-6** participants

**1** question or theme

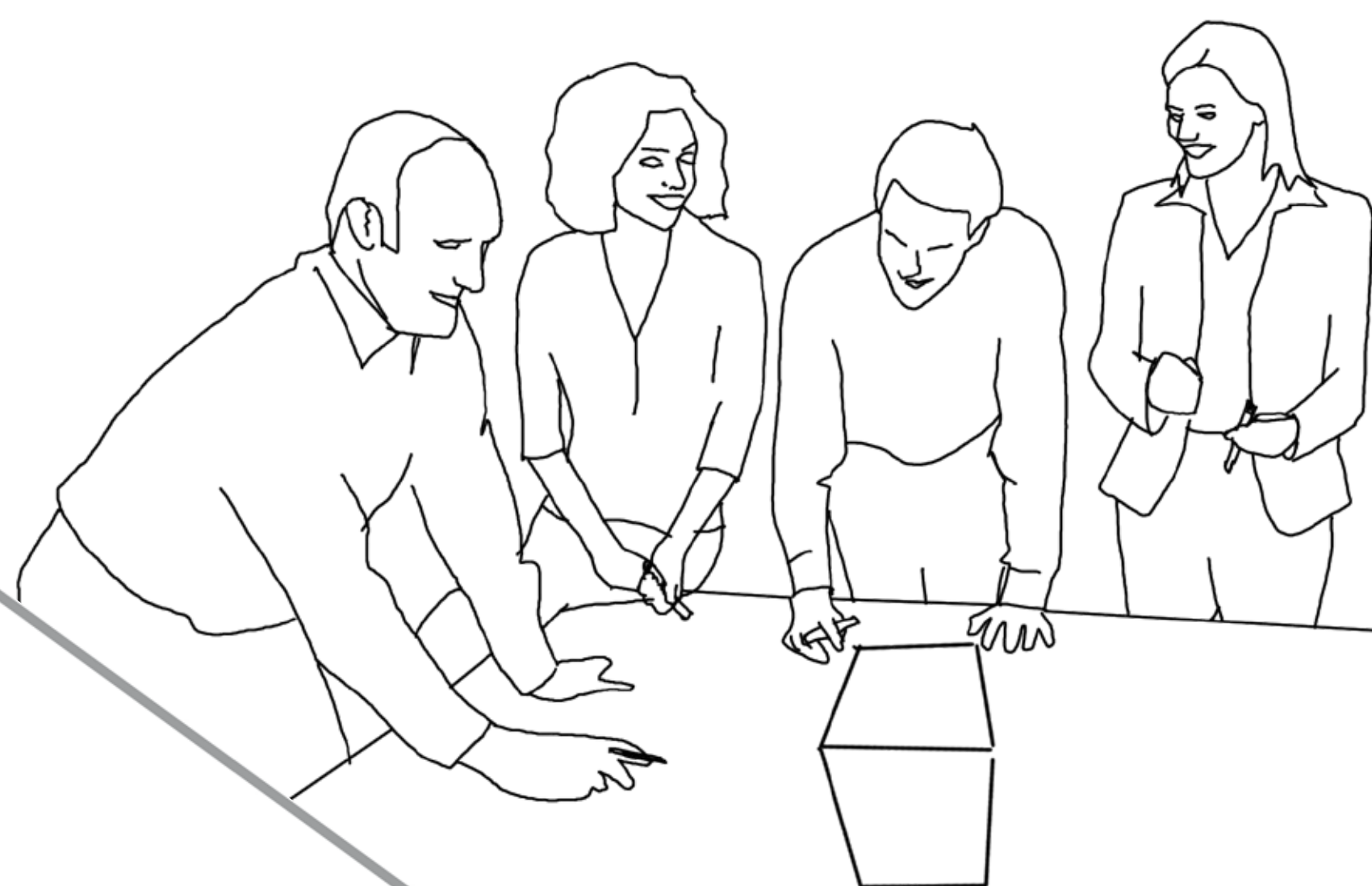
**30** minutes

The **CUbe** session involves a cardboard cube, with no larger than 30cm square faces, as the surface of the cube is intended for writing, noting and illustration. 30 minutes is the ideal length of the session and includes a briefing of the problem that is proposed to the group for solution based ideas.

During the session the **CUbe** is passed around the group. It is intended to project the ideas of participants who would not normally express their design views and document issues that might normally be disregarded in such sessions. Every participant has the opportunity to make an impact on the **CUbe** surface, and as the **CUbe** is passed around fast ideas can be generated through upbeat discussion and a record kept on the **CUbe**. Connections can be made from one idea to another regardless of which side of the **CUbe** they exist upon.

The participants in the session stand around a table. Standing up focuses the activity, to ensure it is a driven and active experience. The location of the session should usually be outside of the usual work setting, and it is kept short to encourage rapid, out-loud idea generation rather than dwelling on thoughts.

At the end of the session, the **CUbe** can be opened up, since it is constructed in a web format and used as a record of the ideas to expand upon. Scanning the surface of the web produces a graphic that can be easily emailed and used to pass the ideas on to any given target, especially those identified through the session.



## outcome

This technique has been, and continues to be used within the Wheel-SAS team to explore and bring together multi-disciplinary design problems that are faced during the development of the system.

