Collaboration through Scrum

Steve Brophy

Collaboration, the process of working together with someone else to produce something is one of the key 21st century learning skills. For collaboration to be truly effective, it requires equal contribution from all parties. However, this is not always the case. In my Year 7 Digital Technologies class, I noticed students struggling to manage their own time, overwhelmed by the newness and complexity of secondary school. The conditions and toolsets available weren't right. After a mid term reflection, I was left with the following two questions.

1 How do we create the right conditions for great collaboration in our classroom?
2 What toolsets do we provide our students to help them collaborate?

Professionally I have been exploring the capacities of methodologies from the Lean StartUp and Agile Software worlds to impact learning and change through short feedback cycles and iterative thinking. This exploration led me to Dr Jeff Sutherland's book *Scrum – The Art Of Doing Twice The Work In Half The Time*. According to Sutherland,

"Scrum is an Agile method designed to add energy, focus, clarity and transparency to project planning and implementation."

Like it's rugby namesake, Scrum is the collective pulling together of people to achieve a common goal, i.e. get the ball out the back or complete a project on time. The Scrum board is the driving guide behind the Scrum process. It is a visual representation of the process and is agile in movement, allowing collaborators to focus their time and energy and feel like they are contributing in a positive and meaningful way. The reason it appealed as a process for assisting students was due in large part to reading about 'Eduscrum' in Dr. Sutherland's book.

Inspired by Scrum, Eduscrum (www.eduscrum.nl) was developed by Willy Wijnands, a Chemistry teacher from the Netherlands as a process to help his students manage their own learning through self-organisation and increased ownership. He changed the language to reflect language the students would understand and he now uses Eduscrum to teach his Chemistry curriculum. To gain an understanding of how this works, lets first unpack the Scrum board.

The start of the SCRUM journey is a *User Story*. In software development, this might be a feature request for a particular user. It is designed to capture the human elements of the process. In my Year 7 classroom, the user story was a Year 1 student. My Year 7 class was a design

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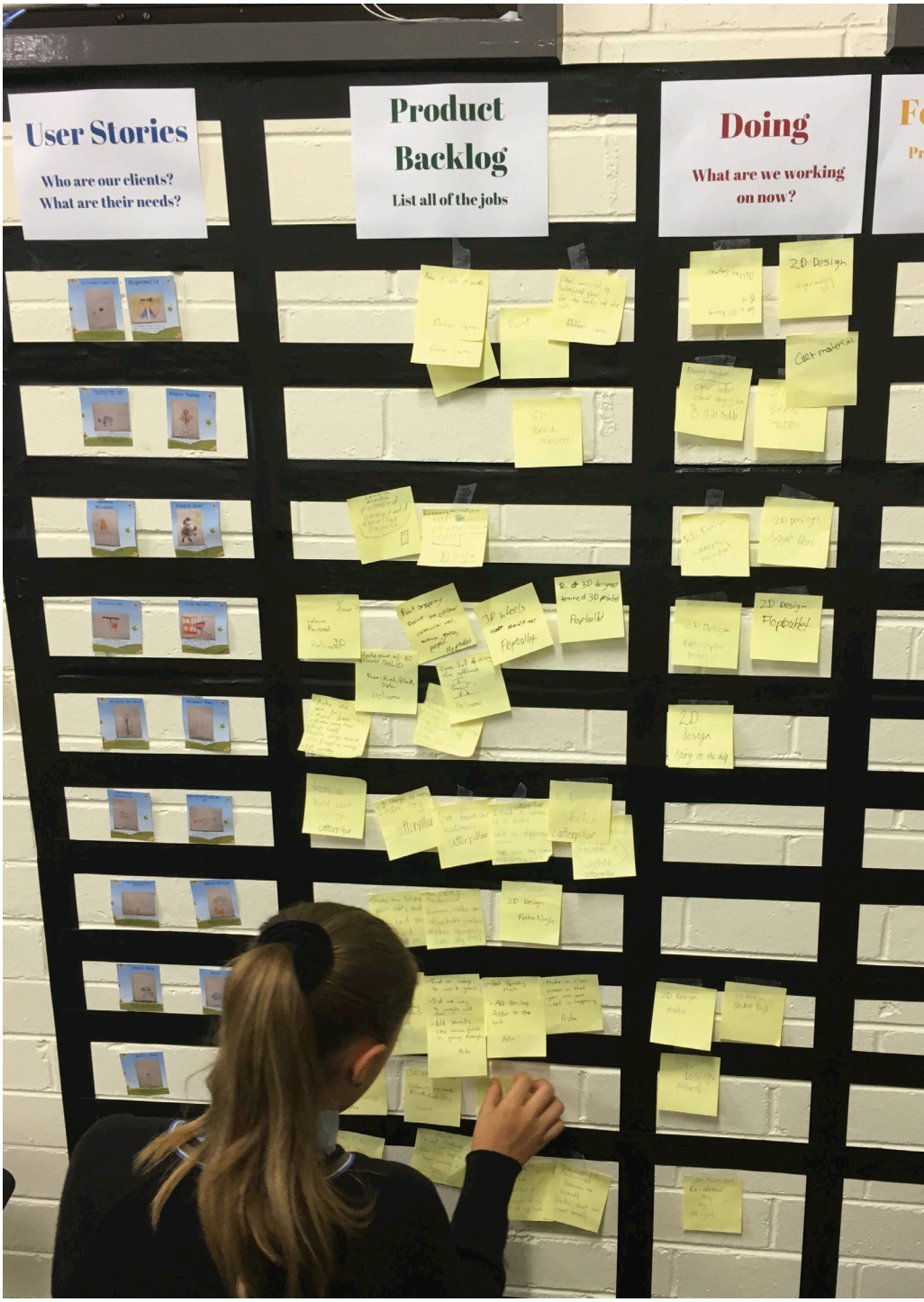

consultancy firm and our customers were Year 1 students. Our job was to take original toy ideas drawn by the Year 1 students and make them a 3D reality. My students had to interview the students to gain a better understanding of their desires and requirements.

From this interview, students had to then break up the project into individual tasks and these are placed individually on post-it notes in the *Product Backlog* or *To Do* column. This is a list of all the work that needs to be completed. The great part about this process is that it guides a conversation about what is really required to complete the project. Students are then also required to estimate how long they think a task will take. The agreed upon time is then placed on the task post-it note, a process repeated for all tasks. This conversation clears up the path ahead for students and allows them to see it as small, incremental steps towards a common goal. The process of time estimation is an area that we don't spend enough time on in classrooms. We need to develop the capacities of students to truly understand the volume of work required and the amount of energy and time it will take to complete it. In the Scrum world, they use a *Burndown chart* to guide this. By adding up all the points of all the tasks, students have a total time required to finish the project. Their job then is to chip away at the points during each class, one task at a time to work towards a zero total.

The next three columns are for work in progress. A person is required to take one task from the backlog and place it in the *Doing* column. They have responsibility for this one task. Once they have completed the task, they place the task in the *For Review* section where this task is verified for completion. This is one of the key teacher interactions during the process. The teachers and students conference about the task and students are required to demonstrate that the task is complete or that they understand the concept. Once the task has been verified that it is complete, it is moved to the *Done* column. The student would then take another task from the backlog and place it in the *Doing* column. The power of this process is that the students work on only one task at a time. It reduces confusion by sharpening their focus and it shows them that their contribution is required and valued. It gives them a sense of ownership.

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