

Oliver's wheelchair travel aid is right on the button

Year 9 student Oliver Griffiths is working on a project that could revolutionise travel for wheelchair users.

Oliver, who celebrated his 14th birthday on Friday, has been working on a project to map drop-kerbs, which will make travelling easier for those who use a wheelchair.

The idea came to him during his time spent at the Little Sandbox Coding Club, where he has been a regular for a number of years.

One of the volunteers there had spoken of her frustration at planning journeys using online maps, only to find she was then unable to cross a road because there was no drop-kerb.

With that, Oliver and a friend at the club, set about creating a web map that would include the location of drop-kerbs so users would see at a glance whether their route was accessible.

Developing

To do that, Oliver had to find the locations of these drop-kerbs and so began developing a device to record their locations which would then be uploaded to an online map.

Oliver explains more: "We created the Kerbinator, a button which, when pressed, records the GPS location of the button."

"The purpose is to crowd source data about where drop-kerbs are located. We want people to take this button and press it every time they find a drop-kerb.

"The data will be written locally and then uploaded to a website when it is connected to wifi. Then the co-ordinates will be plotted onto a map so wheelchair users can plan their routes more easily, taking in the locations of drop-kerbs.

"Once the button is complete, we will make the schematic and design files open sourced and encourage makers across the UK to make their own to contribute data from their local area.



"We've created a prototype using an Arduino and a GPS shield. We are now investigating the map development and turning the Kerbinator into a mobile app."

The idea is one that has captured the imaginations of judges at a number of competitions, with the Kerbinator winning both grants and competitions.

Oliver added: "So far, we have entered two competitions. We pitched the idea for a grant and won £500 from Awesome Liverpool.

"We have also won awards in The Big Bang Contest and have reached the final.

"We were also invited to exhibit our project at the Big Bang @Parliament event last year.

"We went to London and had to have security clearance to enter The Houses of Parliament.

"Once inside, we spent the day displaying our ideas. We set up our stand, introduced

ourselves and our project to the organiser, then people came round to our stand.

"We got some positive comments about our design for the Kerbinator and had a chance to look at the other projects.

"The day ended with speeches from the person in charge of STEM education.

"We are not sure how successful we will be at the final of Big Bang but we have enjoyed being part of the process so far."

The Big Bang final will take place in March in Birmingham.

News in brief

Year 11 Consultation Evening takes place from 4.30pm on Wednesday. There is a Burns Night Supper on Saturday (see advert, right) and the Sixth Form Open Evening takes place on Thursday, January 24, from 6pm.

Year 12 labour on task

Sixth Form students were put to work recently as they learned about child labour as part of their National Open College Network studies.

The Year 12s learned about the long and laborious work that 250 million youngsters around the world are forced to carry out.

As part of the day, the students were made to make paper cranes. Each student had to make 50 cranes before lunch.

It was a task that many found time consuming, boring and, ultimately, made them appreciate the freedom they have here.

A point highlighted by Beth Caddock (12R), who said: "Practicing child labour taught me how lucky we are in this country to not have to do this every day. Instead, we can have an education that gives us so many opportunities for our future.

"The task was tiring and hard to fulfil in the given time, especially because it was so complicated and difficult.

Order

"We were told that in order to leave for our lunch, we must have made 50 paper cranes.

"This has shown me that the children forced into child labour must suffer and not get paid if their task is incomplete.

"I disagree with child labour and, instead, believe everyone should be given the opportunity for an education, a better future and an enjoyable childhood.

"This experience was definitely an eye-opening one."

Overseeing the day was Head of RE, Mr Moorhead, who was pleased with the level of maturity and understanding the students showed. He said: "The students undertook the task with a great deal of empathy and their understanding of a problem that affects 250 million children worldwide has been raised and they now appreciate the opportunities granted to them here.

"Whilst the task was an arduous one, they all completed it and I commend them for the level of maturity they all showed throughout."



Burns Night Supper



Saturday 19 January
7pm for 7.30 sit down
Sacred Heart Catholic College
Lower Site, Myers Rd East

Drink on arrival
Traditional 3 course
Burns Supper

Wine, beer, whisky bar

Entertainment:
Ode to the Haggis
Toast to the Laddies
After dinner games

Ceilidh with callers
and lots of dancing
Traditional Dress

Tickets £25 per head
to book: email -
alsopcrosby@yahoo.co.uk
Ring - 07954695574

