

4.3 Cambridge KIKS Multiplier Schools Events

The Cambridge KIKS event brought together both KIKS team members and others, including teachers from Finland and Spain, and also Spanish students. The event attracted a wide number of community visitor young and old, STEAM experts and not...during a six-hour open day, which attracted 70 visitors (non KIKS).

The UK Student Presentations featured student experiences on what makes a KIKS project. They presented:

- Constellations and Pointer Stars- Peer to Peer Teaching – A presentation
- Circumpolar stars – Peer to Peer Teaching - A Mathematics Workshop
- The Philae Lander - Learning By Design – How to design and develop your own STEM workshop
- Chaos Theory – Presentation and Hands on workshop for the students



This gave an opportunity for teachers, students and others to get to know each other



Then Spanish Students made excellent presentations described elsewhere on

- Dark Camera:
- Memory
- Golden Ratio
- Wireless telegraph
- Led focus





In an event the same day, Linton Village School demonstrated and presented their Wind Tunnel Aerodynamics project - with a demo of their experiments in the wind tunnel. This attracted thirty visitors.

Wind tunnel - Challenge: How can we use micro:bit to accurately control the experiment. [See the wind tunnel](#)



<https://youtu.be/nJYhXfWjEjI>

The event featured in:

<http://www.cambridge-news.co.uk/news/cambridge-news/cambridgeshire-school-students-turn-tables-12776521>

Leading a lesson in science

ASTROPHYSICS and chaos theory were on the agenda at one village college as students turned the tables and tried their hands at teaching. Youngsters at Sawston and Linton village colleges have been leading from the front, as they took part in an international project that saw them heading their own lessons on a scientific topic of their choice.

After working through their lunchtimes to prepare their lessons, the schoolchildren were joined last week by students and researchers from universities in Spain, Hungary and Finland, as part of the international Erasmus scheme.

The project was led by Elizabeth Crilly, director of educational charity Stem Team East.

She told the News: "The students in each school came up with activities they wanted to do themselves and totally self-managed it to inspire other children, so it's peer learning.

"It worked brilliantly well. And they have been leading the way on it."

After working in the two schools the international teams also took in events at the Cambridge Science Festival.

Elizabeth added: "In Sawston they were more theoretical, looking at astrophysics, space travel, and chaos

theory, and a project on the Philae space lander and the Rosetta project. "But Linton was much more hands-on with a more practical approach.

"They did an investigation using a wind tunnel built by the school technician a couple of years ago, but these students are the first to use it, with a smoke machine to show the aerodynamics at work."

The next stage of the ongoing project will see the students incorporate the Microbit computer system into their projects, while some of the Sawston pupils will also be travelling to Budapest to continue their work.

Elizabeth said: "They have been self-motivated and self-taught and they were teaching their peers working at an extremely high level.

"Afterwards they were really quite delighted with themselves, they all realised how much they had learnt and were all quite pleased, and I think they appreciated how hard it is to be a teacher!"

For more about the charity and the work it does across the region encouraging students to take up Stem (science, technology, engineering and maths) subjects, see www.stemteameast.org.uk.



TURNING THE TABLES: Educators from universities in Spain, Hungary and Finland and school students from Spain are coming to Sawston and Linton village colleges to see work on their international Erasmus projects. Picture: Keith Jones

A video by the Spanish team can also be seen at: <https://youtu.be/FtUws8iEmlw>



For their work, the students received CREST Awards. This award is UK-wide and accredits attainment in STEM:



4.4 Ipswich KIKS Multiplier School Event

Westbridge Academy has a maximum of 32 students with special educational needs. They received 20 visitors.

The Raedwald Trust Westbridge Academy has created a Chain reaction featuring chemical reactions, robots, Arduino, Micro bit and much more. It is a remarkable creative mix of science, technology, engineering, ART and maths (STEAM), which has to be seen:-). It is clear best practice in demonstrating the collaborative problem solving project approach advocated by PISA (Programme for International Student Assessment) and IB (International Baccalaureate). Their STEAM team developed a remarkable Chain Reaction which can be best seen in the video:

<https://vimeo.com/222487526>

However, here are a few stills from the above:





