

Innovation Times

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Inspiring a new generation of scientists

Priceless!



By Jessica Bartholomew, Tabitha Baker, Kira Welland and Alice Roberts Dunn

On Tuesday 25th September, avid scientists and engineers from 30 schools in Kent descended upon The River Centre in Tonbridge for a day of innovation and invention.

After being introduced to TeenTech by Maggie Philbin, its Chief Executive, the 300 teenagers submitted their ideas for inventions in the hope of bagging themselves one of the prizes – an iPad and two iPod shuffles.

TeenTech is an organisation, which has set out to inspire a new generation of engineers and scientists, through days such as this across the country.

With stands such as 'Google' and 'JVC' inspiring students to look at

Maths and Science as career prospects, and popular app designing challenges encouraging a new view of engineering, it is obvious that TeenTech is achieving its aim.

Students took part in technological challenges and were inspired into innovation in ways that have

gated and opened their eyes and imaginations to the possibilities presented to them by the professionals they met with.

Excitement and prosperity was tangible in the air, as students posted their invention ideas on the fountain in the foyer area, which



Live tweets on the day #teentech

@teentechevent: Maggie Philbin on stage at TeenTech Kent @teentechevent: 'Queen Mary Uni and their Musical Instrument Hacking challenge at #TeenTech Kent'

@BBCmarknorman: 'Can science days really encourage youngsters to make different academic choices? #teentech #bbcsoutheast' @Pavegen: 'Making students engage with science and encouraging them to make different academic choices with Pavegen tech today! #teentech #thefuture' @maggiephilbin: '#TeenTech in Tonbridge with 300 teenagers ..grt activity from QMUL. Hacking musical instruments.' @EBPKent 30 schools, totally engaged, impeccable behaviour from all students. Kent employers very impressed @EBPKent what an incredible experience you delivered for young people @TeenTechevent

never before graced a classroom.

The day marked the day our future web designers, software programmers and physicists congre-

soon turned into a symbol of the future of our technology. A team of Weald of Kent students reported on the day...enjoy their work!



'They were shocked to discover people in polo shirts and battered Converse were scientists...'



THE nearest activity available for students after the opening speech is the musical instrument hacking held by Queen Mary University just inside the hall. The session involved a short lesson on electronics and 'constructing guitars' showing the science of something familiar to the students.

As a small group entered the room the instant reaction was 'Ahh cool! Guitars!!' Not to mention the shock of discovering that the people standing round the room in polo shirts and battered Converse were actually scientists.

Their attention was quickly set on the task, beginning with the staff explaining the physics of the instruments using musical terminology. The students were eager to answer the questions thrown at them to do with their experience with electronics and the technology they use at home.

Overall, it was a successful experience as the staff of Queen Mary University gave the students a new impression of scientists—including music, jeans and Converse. The students picked up the useful information of

physics in their daily lives. A large part of the day was centred around the development of apps.

App designer Dave Addy introduced students to the world of app design, before asking them to develop their own ideas for an app, create a clear, simple and recognisable icon and pitch the idea to the audience.

Apps varied from a 'Ticket Quickit' app which allows quick purchase of tickets online to the 'Fans HQ' app, designed to track celebrity activity. We caught up with the girls behind 'Fans



'Engaging with students...'

SEPTEMBER 27th 2011 marked the day of the first ever TeenTech. One year on at the second exhibition, we've spoken to Anne McNulty the CEO of the Education Business Partnership (Kent) about what TeenTech is about.

IT: 'Is technology the future of jobs?'

Anne: 'The challenge is the gap between schools and the world of work. We want

to bridge that gap so students can speak to people at work. There are people here who work in jobs that didn't exist five years ago, with the latest technology. At school you might not get that for ages'.

IT: 'Of course schools have a budget'

Anne: 'And you end up with wealthier families having that technology and

others children not having access at all. Last year, TeenTech was such a roaring success there was no doubt that we needed to do it again'

IT: 'What feedback did you get last time?'

Anne: 'There were students saying "It was the best day of my life"!''

IT: 'Things like this can hatch a new way of teaching and a new way of



Students get stuck in to the activities at TeenTech



HQ' from Maidstone Girls' Grammar School, who told us that their app was designed with a teenage target market in mind, and that they reached their end product through the ideas submitted by each student in their group.

The workshop not only sparked the imaginations of the students, but was used by Dave Addy to inspire his app design company.

'We get inspiration for our own apps,' he says 'we also get to know more about what kids want, of course we're not young people so we don't know what they want.'



thinking about careers?'

Anne: 'It's complementary for schools to participate because some students love to learn traditionally, some love to learn by doing and some love to learn by talking and listening.'

IT: 'So students get on a website and look back on what they've done?'

Anne: 'Yes, at teentechevent.com.

IT: 'Most students drew male scientists...'



Anne: 'Engineering isn't about working with a rag and getting dirty as many girls may think, engineering is high end technology. Engineering

can be creative and some of the most creative minds are women.'

You can read the full interview at newsforschools.co.uk.

Maggie's motivation



Maggie Philbin is buzzing with energy. We catch her after she has finished her speech; zipping around the 300

excited young people, shooting down their stereotypes like a character in a Western.

She questions the belief that three quarters of the 12 to 14-year-olds present thought your average scientist is male, and called out 'the mad scientist' stereotype for the myth it is.

Keen about her work and full of enthusiasm for young people and science, her motivation is striking. We managed to pin her down to discover more...

Q: What is TeenTech?

A: Lively and interactive events to help young people get into science and technology.

Q: So what inspired you?

A: I met a group of students a while ago and asked them to name a contemporary scientist or engineer and they could only name Albert Einstein! They wanted to learn more about science and I wanted to help.

Q: What does the future hold for science and engineering?

A: We're at a critical point. The people who will have science and technology jobs in the future have the right skills are all in places like China and India where they invest properly in their young people. We have to change here, to invest in the future.

Hello to the news team



Alice Roberts-Dunn Y12: I want to make a difference in the world and journalism is the best way to do that giving people

a voice who don't already have one, who aren't already listened to. Today has helped young people find out what career they would like to do and it's important that science and technology get promoted in young people because they're not done so much. The one thing I've taken from today is learning to interview people, It's quite scary when you first do it but once you learn the tips it's much easier.

Thank you, also, to **Kira Welland**, who was busy reporting on the closing speeches and presentations when these interviews were taking place!

Jessica Bartholemew Y13: I'm really



interested in English literature, and journalism ties nicely in with that. Today has been really eye-opening especially for younger students. Some were

already interested in science, some weren't but they all find it a lot more interesting now. I've learned how difficult it is to interview people and to

transcribe what they've



said and also how important it is for young people to become scientists and engineers—especially women.

Tabitha Baker Y13: I have always been

interested in journalism and writing creatively and it's a good way to merge that with my interest in the media. It's brilliant that so many children have been inspired by what they have seen today, and that so many have taken so much away from it. I've learned how much organisation is key to journalism; you need to get things done quickly.

Note from News for Schools: The writing, photographs and design are the work of the four students interviewed above. They interviewed all the people involved, typed up their work and organised it into sections, based on a briefing at the beginning of the day. Well done all!



Things the students said...

TeenTech started with an enthusiastic introduction. The students were able to interact in a poll using Quizdoms—small electronic devices allowing them to answer multiple choice questions.

The chief executive of TeenTech Maggie Philbin encouraged honest answers by dotting around the crowd and asking students for their feedback.

The results showed there was an even distribution of young male and female visitors, but when asked to draw a scientist two thirds of the group drew a man.

Other questions asked where to do with the students' interests in scientific careers. The answer was 'little interest' but Philbin seemed set that the views of the students would change by the end of the day due to the array of activities.

From our experience, this is exactly what happened as the students showed great interest in the day. And for the last bit of motivation, there was a competition to win an iPad for the best idea on the fountain ideas board.

Meanwhile, the Innovation Times



reporters found out what students thought of the event...

Northfleet

Technology School:

Left: Jack Tillsley 'I thought science was boring. Now I don't.' Right: Logan Marsh 'This has made science seem a

lot more interesting. We never do anything this fun in school.'

Skinners Kent Academy

Left: Danoush Taslimi 'I thought scientists were a bit boring but this has made them seem interesting.'

Right: Syimyh Kyshtoobaev 'This technology is new and I've never seen it before. It's so interesting. I'd like a career in science.'

Left: Lily Malley 'A lot of people think of men as scientists but I'd like to be one when I'm older.' Right: Fruzanne Weller 'I couldn't live without my phone because I wouldn't be able to contact my parents or talk to my friends.'

Canterbury Academy (both 12) Left: Sophie Fogg 'I couldn't live without my



phone, I use it in emergencies to call my parents. I want a career in science.

Scientists and people here today really inspire me because they're worked their butts off at school to get their jobs.'

Right: Jessica Annakie 'I use my computer to talk to friends, especially in other countries. I don't think woman should think they can't be engineers. I wouldn't mind being one.'



#teentech...have shown the fun in science

@NewsforSchools And the overall winner of the app design competition is: Wilmington Academy @NewsforSchools App design competition results! The best icon design winner is: Skinners School! Well done Lily from Skinners Kent Academy for winning the iPod shuffle! @NewsforSchools Have the students' answers changed by the end of the day? Yes! Team TeenTech have shown them the fun in science @EBPKent enjoying the first app presentations. The future is here!

@NewsforSchools Mascal's app: iSight holographic communication app fab! @NewsforSchools Anne, the CEO of EBP, says women are needed to get into science, technology and engineering @NewsforSchools Keynote speech in progress, using technology to find out what kids know about technology. @teentechevent Young teenagers creating a fountain of ideas at TeenTech Kent