



# Meet the news team



**Olivia Brodie Stuart**  
I have enjoyed working alongside a journalist. K ø x g " j c f " v j g " g z r of creating something tangible. My favourite part of the exhibition was the 3D TV and the 3D Nintendo and phone. My favourite app was the I Spy Species.

### Flo Simpson

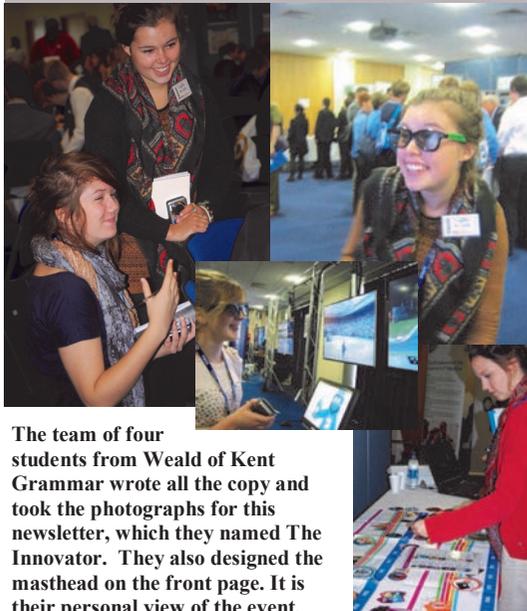
My favourite part of the day was looking at the exhibition and talking to the man from Google. He showed me how to use available technology in a y c { " K " f k f p ø v " m p q y " y c u ' day has also helped me hone my writing and design abilities. I also enjoyed the free lunch. Cheese and onion is a wonderful combination!

### Hannah Davies

My favourite part was the BBC stand. I liked seeing the new TVs ø they were amazing. I would invent a hover scooter to get to school ø it would avoid the traffic and the insurance would be cheap!

### Ruby Forbes

I liked watching the App Challenge because the enthusiasm of the students was really uplifting. It was fun to see them being so creative and enjoying themselves. My favourite App was the glasses App, which makes things clear. It would help my mum!



The team of four students from Weald of Kent Grammar wrote all the copy and took the photographs for this newsletter, which they named The Innovator. They also designed the masthead on the front page. It is their personal view of the event.

# The Innovator

27.09.11

Designing Tomorrow, Today



# Future scientists get their lightbulb moment



Pupils try out 3D technology

By Flo Simpson, Olivia Brodie Stuart, Hannah Davies and Ruby Forbes

It is hard to imagine that YouTube is only six years old, that before 1969 the internet did not exist, when today we are always connected, whether for work, entertainment, security, knowledge and social r w t r q u g u 0 " V q f c { " k u " v j g p e o p l e i f a g c i a t e d b y s e i g n e r a n d e n g i n e e r i n g . " c p f " p g x more so than on the internet.

J q y g x g t . " v j g " r w t r q u g e n c e a n d t e c h n o l o g y f a i r i s t o b r o a d e n t h e h o r i z o n s o f t h e s t u d e n t s t o c o n s i d e r t h e s c i e n t i s t s a n d e n g i n e e r s , o f w h i c h t h e r e a r e 1 4 0 h e r e t o d a y , b e h i n d t h e g a d g e t s t h a t m a k e t h i s i n t e r c o n n e c t i v i t y p o s s i b l e .

There is an ambiance of anticipation as we all file into the assembly hall at the River Centre in Tonbridge. As the 297 students present at the event sit down in the hall, one question can be heard mut- v g t g f " h t q o " v c d n g " v q " v k p i " v q f c { A ø " P q " q p g " u g g o W i t h a f o c u s o n c r e a t i v i t y a n d i n d e p e n d e n c e j c v " v w h o l e d a y i s a b o u t . T h i s a t m o s p h e r e o f c o n f u s i o n i s i m m e d i a t e l y q u e l l e d a s s o o n a s e a c h c h i l d i s h a n d e d r g q r n g ø u " k f g c u " v q " v j g " h q t g

a piece of technology óa voting gadget for them to use during the coming talk. Instantly there is audible chatter and a real sense of excitement and ultimately this is what the day is about ógetting young people engaged by science and engineering. " c p f " p g x

Co-founder of TeenTech Maggie Philbin is well-known for her stage presence and conducts a survey of young scientists. " ÷ Y j c v " g z c e v n { " k u " j c

Her stage presence is both noticeable and very impressive; by getting each child to draw their idea q h " y j c v " c " ÷ u e k g p v k u v ø " u j q w stereotypes in an instant, throwing the idea of a mad-haired, antisocial-genius out the window and allowing each child to believe they themselves can be scientists. " ÷ Y j c v " g z c e v n { " k u " j c k p i " v q f c { A ø " P q " q p g " u g g o W i t h a f o c u s o n c r e a t i v i t y a n d i n d e p e n d e n c e j c v " v w h o l e d a y i s a b o u t . T h i s a t m o s p h e r e o f c o n f u s i o n i s i m m e d i a t e l y q u e l l e d a s s o o n a s e a c h c h i l d i s h a n d e d r g q r n g ø u " k f g c u " v q " v j g " h q t g

# John reveals the story of TeenTech

**We caught up with event co-ordinator John Tranter for a quickfire interview about the TeenTech event:**

**Who organised this event?**  
It was a combination of TeenTech and EBP Kent.

**Who is EBP Kent?**  
EBP (Education Business Partnership) Kent is an education-based company that do things such as bespoke workshops and careers fairs for students, but we also act as a broker between businesses and schools, helping connect them.

**Why was this event organised?**  
The UK has had generations of inventors and scientists, but there has been a decline in this trend. The East is now producing a large number of these scientists and inventors, and obviously the economic climate will be having a negative impact on this.

**How many schools are there?**  
We have 20 companies, there are 10 doing the Challenges, and we have an App team here too. Some of the companies, like Google and the BBC, are partners of the TeenTech brand, and others, such as Leicester University, offered their services for free.

**What do you hope the students will take from this event?**  
I really hope they will take away some idea as to what they want to pursue in the future. Obviously it is a very competitive world after school. We hope they will be inspired by the fantastic staff and exhibitions we have here.



**How did they get involved?**  
In the Inside Zone [where the Exhibition takes place] we have 20 companies, there are 10 doing the Challenges, and we have an App team here too. Some of the companies, like Google and the BBC, are partners of the TeenTech brand, and others, such as Leicester University, offered their services for free.

# A waterfall of ideas

After being given a Post-It note at the beginning of the day, these same Post-It notes later transformed the water feature in the main entrance of the River Centre.

These were bursting with notions for interesting, albeit ambitious, ideas for future inventions, reflecting the integral innovation of the pupils.

We caught up with them later to discover some eye-opening creativity.

McKittick Refractor collar allowing your pet to talk or show its feelings was alongside other ideas such as x-ray glasses and a pill which alters your appearance. Alisha Durand had the idea of a radio that starts a conversation with you in the morning.

Students were clearly enthralled by the variety and sheer innovation of the technologies displayed.



**A radio that starts a conversation with you in the morning!**

Year 9 student Adam found the fun and inspiring particularly making the wood grid, which demonstrated the strength of the material. His contribution to the Invention Waterfall was the much-desired teleporter.

**A see-through toaster so that you can see when your toast is ready!**

Meanwhile, the opportunity to do a weather report was favoured by pupils of Queen Elizabeth School, whose invention of choice was a remote-controlled vacuum.

The diversity of ideas and experiences on offer for the

students clearly acted as an inspiration, allowing pupils to recognise the excitement new technology has to offer.

There was a tangible sense of excitement in the main assembly hall as the App inventors Dave Addey, Justin Spooner and Alyson Fielding spoke of their recent endeavours; a train app that works out the next train home from wherever you are, alongside their number one selling QI app.

The iPhone has become a hugely popular device, and the number and diversity of apps already available is huge. The challenge to come up with an original idea is more difficult than it initially appears, but the students rose to the task with zeal. U q . " v j g p " e c o g " to rewrite the rules of the technology world, creating an C r r " ÷ v q " u q n x g "

The students brainstormed with a definite buzz of innovation. The groups were alive with ideas as diverse as using the integrated camera on the iPhone as a glasses lens for when you forget your specs, to an I Spy Species app to identify dangerous insects and direct you to the nearest antidote using GPS technology. Another excellent idea from Dover Grammar School pupils was a translation app, but Google had already beaten them to the post.

Walking around the room, it was clear all children were getting involved, with a particular zest shown by thirteen year-old Connor, who found the k p v t q f w e v q t { " v so because of his passion for Biology. At another table, team members were encouraging each q v j g t " v q . " ÷ v j k to develop more original ideas. Creative energy was also channelled through the designing of icons and logos, which were

# Pupils enjoy an Appy day



ferverently being drawn on all tables. Northfleet School for Boys were overheard discussing their homework app and their teacher was seen to be very pleasantly surprised. This included a calculator, protractor, email, a link to your text books and it was to be free for under 16s. Meanwhile, Sackville school opted for an app on your iPhone or iPad that would sync with your

xbox, Playstation or Wii should you forget or not have a controller. After the pitches by students representing each of the different teams, the professional app designers had praise for every idea. The App Challenge clearly brought out the innovative side of all the pupils, and the app creators were evidently enthused by the energy and excitement displayed by the students.



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X U m ' c Z ' z

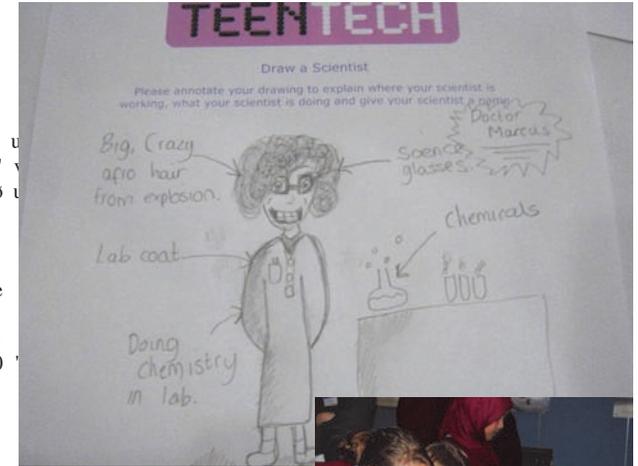
As students walked around the exhibition they had the opportunity to question professionals from a range of different engineering and scientific careers.

H t q o " F g p p g ø u " u e q p u v t w e v k q p . " v 5 F " V X " c p f " K G V ø u gaming involving a bob skeleton simulator, students from Years 8 and 9 from all over Kent, had practical experience of the diverse range of jobs available.

One of the most popular stands y c u " v j g " D D E ø u 0 the TVs of the future. There were dual screen televisions where two viewers could each watch a different channel whilst watching the same screen by wearing polarised glasses, 3D TVs without glasses and a silver-screening TV with connection to the internet.

Other exciting activities were r t q x k f g f " d { " ÷ 6 their remote control obstacle course, Cummins Power and their mini, kinetic- powered Grand Prix ÷ N q q r ø . " y j q u g " groups of students rebuilding computers from spare parts, and the Army. Oliver and Max (Year ; + " h t q o " U m k p p g r k e v w t g u " q h " T k e h v c k e e g " n \* ø v " q v f j c g { " ø u " experience was.

There were two Challenge Zones for groups of students to perform tasks. One fascinating



challenge was led by the Forensic Imaging Group, where students were able to use the police program, invented by the University of Kent, used to create

z i k e s k e p o f a r i m i n a l s f o r n u ø awareness and wanted posters. The groups were split into pairs. One of the pair were witnesses and had seen the criminal, the other was the operator. By using v j g " r t q i t c o ø u " x d t h e k a r e y o f t h e s t a l l s a n d n " features, the teams were able to b u i l d s u r p r i s i n g l y a c c u r a t e r k e v w t g u " q h " T k e h v c k e e g " n \* ø v " q v f j c g { " ø u " - d e v e l o p t e c h n o l o g y n i s s i d e b y t h e young people of today óthere was not a crazy-haired, lab coat wearing professor anywhere to be

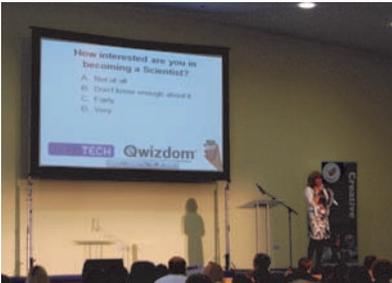
This complex system highlights the importance of technology within the structure of our e q o o w p k v { " c p f " k f o u n d . u " e n g c t " v j g "



students connected with this. Meghan (Year 9) from Hillview y c u " ÷ t g c n n { " g z e k v g f g f j k e j " ÷ g z e g g f g f " g x g has imagined. One of the pair were witnesses and had seen the criminal, the other was the operator. By using v j g " r t q i t c o ø u " x d t h e k a r e y o f t h e s t a l l s a n d n " features, the teams were able to b u i l d s u r p r i s i n g l y a c c u r a t e r k e v w t g u " q h " T k e h v c k e e g " n \* ø v " q v f j c g { " ø u " - d e v e l o p t e c h n o l o g y n i s s i d e b y t h e young people of today óthere was not a crazy-haired, lab coat wearing professor anywhere to be found. u " e n g c t " v j g "

# Tech -savvy Maggie:

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Maggie Philbin has worked at the BBC for over 30 years and was the first person to demonstrate a sat-nav. She is a co-founder of the TeenTech programme and an admirable source of knowledge on all things technological! We catch up with her on her views on science...

**What is the most useful invention of the last 20 years?**  
The mobile phone, because it started as an object to make calls yet has developed into a ÷ e q o r w v g t " k p "

**How has science become more accessible for the younger generation?**  
Students are consumers of technology and this gives them a wider knowledge of technology than their parents had. However the older generation has a better logical knowledge on how objects work, 50 years ago a curious child could take off the back of a watch to learn about the mechanical workings of it - the same cannot be done to an iPad.

**Why is science important?**  
K h " { q w " f q p o v " { q w " e c p o v " o c m decisions about things, for example the media reportage that the MMR vaccine is not u c h g . " k h " { q w "



the science behind it you are just basing your decision about { q w t " e j k n f o u " newspaper headline. We all need to be scientifically literate.  
**Scientists are often considered better role models than actors or pop stars. How do we encourage young people to aspire to more academic futures?**  
fyqumced to help children u v c

make the connection, Children have an image of men in white coats but many scientists never go near a lab. So you must try and connect science with contemporary images.  
**Do you think technology can ever be a hindrance?**  
K v o u " c n n " c d q w judiciously and it is important not to be overwhelmed by technology. There is a wicked side to technology in that it is

not sustainable as we are constantly pushed to update what we own.  
**Science is not traditionally a female industry. Have you ever experienced gender stereotypes?**  
Female scientists can feel isolated but it is not something that can be generalised about. Some companies recognise talent before anything else but not all do. But it is starting to change.

**If you were to invent anything, what would it be?**  
K " u v k n n " v j k p m truly intuitive computer.  
V j g t g o u " u q " o w everyone is capable of using technology instinctively not just the young or tech-savvy.  
**There is a stereotype that you need to be a genius with a sky-high IQ to be a scientist. What would you say to those who are intelligent enough?**  
Those students who want to do

The News for Schools reporting team interview TV presenter and co-founder of TeenTech Maggie Philbin

f t c o c " q t " G p i n k V u j f " c f { q o p u o " v V " g c n p n V " g e a r n t i s y o u k o g l y p e t a b k u t i f v e think they will become Shakespeare, they are happy to do it at a certain level because they enjoy it. This is something we want to show students today, that they can get into science at an entry level.  
about saying there are different ways of doing this. You do not need to go to university.  
**What is the importance of looking into the future?**  
K o x g " u r g p v " o { " y e j c c t v g o u t " " i n q q k p m i k " p q i p " k p k p v q " v j g " h w v w t i n g u s t r e e s p o s i d e y y p u r o w f l . K o x g "