



TDI AWARDS

CELEBRATING TECHNOLOGY, DESIGN AND INNOVATION

Towards the end of the summer term the University of Warwick hosted the Technology Design and Innovation awards for students. The event is sponsored by the MTA and TEP and has become in only its second year a popular and exciting event.

Students across the age range 11-19 entered practical and portfolio work from all over the UK. We saw an increase of almost 25% on entries from last year's inaugural event. It was a real privilege to meet the students and their teachers and review the work and entries. Knowing it was going to be a tough decision making process for judging the entries and putting them into rank order we were very fortunate to enlist the help of **Dave Rowley of Young Engineers for Britain** and **Heather Hawthorne from F1 in Schools** to join the judging panel from TEP and the MTA. At the initial stages of selection we were also pleased to have **Ian Williams from QCA** and **Ian Good from the MTA**, join the panel of judges.

The wider D&T community is seeking to exemplify and establish the principle of innovation as distinct from the design process and the need to teach towards innovation. The title of the challenge, we think, reflects the need and desire to acknowledge and celebrate innovation in D&T. Furthermore the **TDi Challenge** seeks to establish the clear links between the school D&T experience and the wider manufacturing and marketplace challenges of industry. We hear so much about the 'knowledge economy' and it's centrality to UK PLC and yet innovation and creativity are pivotal in revitalising our industrial economy and its reliance on quality manufactured goods.

We think our **TDi** finalists struck on the emphasis of innovation rather well and we were delighted to see a broad range of products reflecting a breadth of D&T capability.

There are three age group categories and awards for 1st, 2nd and 3rd place including Laptops and top of the range Digital Cameras as well as Technology resource vouchers for all finalists. Age categories included 11-14 years, 14-16 years and 16-19 years. At it's core the award placed a particular emphasis on Computer Aided Design and Manufacture, Electronic Product Design and Systems, Control and Robotics.

Finalists work was truly humbling for us as judges in particular the work of young students like **Kartik Logishetty** from **Yarm School** who scooped a first prize with his PIC based sensing system for patients recovering from foot and leg surgery and the requirement to monitor and limit the pressure on foot and limb during the recovery period. The folio work, research and development was stunning with a purposeful appropriate outcome that was truly innovative. Second place in category behind Kartik was **Alex Howe** from **Boldon School**. Her delightful yet creative approach to jewellery design and manufacture was a credit to her school integrating hand skills and CAD/CAM and reminding us that a criteria for good design and innovation can be found in less complex products.



▲ The panel of TDi judges review the student entries



1ST

CATEGORY B

Kartik Logishetty
Yarm School,
Cleveland

▲ MTA/TEP TDi 1st prize winner (category B)
Kartik Logishetty of Yarm School, Cleveland
with his PIC based pressure sensing system



▲ 1st prize winner Kartik Logishetty receiving his Laptop Computer and certificate

MTA TDI AWARDS

CELEBRATING TECHNOLOGY, DESIGN AND INNOVATION

2ND CATEGORY B

Alex Howe
Bolden School, Tyne and Wear



1ST
CATEGORY C

Ashley Butcher
Borden Grammar School,
Kent

2ND
CATEGORY C

3RD CATEGORY B

Gisselle Casio
St Angela's Ursuline Convent School, Newham



Ashley Butcher had travelled up from **Borden Grammar School** in Sittingbourne and gave us a rare treat with his entry. Not content with being a single category entry his CAD/CAM hand control unit was devised to replace the mouse as the design tool interface, for in this case, ProDesktop software. His entry neatly fitted into electronic products, systems and CAD/CAM categories. The product, prototyping, electronics and manufacturing techniques were quite outstanding and the judges rightly considered Ashley as a first prize winner. **Oliver Vaughn** from **Welshpool High School** had a long journey into Warwick rewarded with second prize in his category with an interesting approach to electronics and moulding techniques in his temperature sensing baby feeding spoon designs.

Electronics, control and PIC based projects were well represented with entries including devices for tuning organs, launching and testing model planes, six legged robots and remote radio alarm systems. We were pleased to have some thought provoking entries like **Giselle Casio's** Perfume bottle design that took in a breadth of prototyping and modelling skills in 2D and 3D CAD/CAM as well as some interesting embossing work. Furthest travelled was **Vicki Smith** from Helston Community School who brought up some fine Pewter Jewellery. Designed, moulded, cast and polished and well presented with a distinctive 'Cornish' and Barbara Hepworth influence.

PLACE	CATEGORY	PUPIL NAME
1st	B	Kartik Logishetty
2nd	B	Alex Howe
3rd	B	Gisselle Casio
Runner up	B	Tiffany Vracas
Runner up	B	Jonathan Dredge
Runner up	B	Steven Round
1st	C	Ashley Butcher
2nd	C	Oliver Vaughan-Jones
3rd	C	Ross Fobian
Runner up	C	Jacob Allinson
Runner up	C	Maxwell Parfitt
Runner up	C	Vicki Smith
Finalist	A	KS 3 Group



CATEGORY C WINNERS



Oliver Vaughan-Jones
Welshpool High School,
Powys

3RD
CATEGORY C

Ross Fobian
Lymm High School,
Cheshire



CATEGORY B RUNNERS UP



Tiffany Vracas
St Swithun's School, Hamps



Jonathan Dredge
Heathside School, Surrey



Steven Round
Millom School, Cumbria



CATEGORY A FINALISTS

KS 3 Group
Dulwich College
Preparatory School



CATEGORY C RUNNERS UP



Jacob Allinson
Huddersfield New College, W. Yorks



Maxwell Parfitt
Heathside School, Surrey



Vicki Smith
Helston Community College, Cornwall

ORGANISATION NAME

Yarm School

Boldon School

St Angela's Ursuline Convent School

St Swithun's School

Heathside School

Millom School

Borden Grammar School

Welshpool High School

Lymm High School Mr Philip Smout

Huddersfield New College

Heathside School

Helston Community College

Dulwich College Preparatory School

In all 17 finalists attended most with their teachers and a few with parents. Our thanks and delight are extended to all those who took part. In every sense every entry was a winner and exemplified the creativity and innovation taking place in our classrooms. Our thanks also to all the staff involved in making the day and the awards a special event for all the students.

If you want to take a closer look at some of the entries, images and descriptions can be found on the TEP website under **TDi Awards** and do take a look at the MTA website. It represents its Machine Tool Industry members across a diversity of manufacturing disciplines and can provide a useful source of data and information. If you do have the chance to obtain a copy of the CD-ROM **Manufacturing Innovation**, jointly produced by TEP and MTA it will prove a useful and enduring asset and resource from Key Stage 3 through to Key Stage 5.

We look forward to entries for next year's **TDi** awards and hope to see you there too. Final thanks must go to Michelle Grady from MTA who tirelessly chased up entries and organised paperwork and got us all in the room on the same day. Thank you, Michelle.