

Design Tech Truck – trial run

Background

Design Education CIC (DE) is a non-profit company registered with the Community Interest Companies Regulator. Its mission is to support the creative education of children and young people through designing and making activities, both in school and out of school.

There is a present and urgent need to grow DE's business to produce additional revenue and thus to achieve long-term sustainability. A range of options have been explored that might generate this growth; one of them is the use of a small truck to take manufacturing technology, both low- and high-tech, into schools. Thus the Design Tech Truck (DTT) was born.

However, questions remained. How feasible is this idea and would schools buy into this service in sufficient numbers to make it a success? To answer these and other more practical questions, a trial run was carried out in the first half of the school term, in the Autumn of 2017, across London. The aim was to create an MVP – a minimal viable product – by taking on temporary staff, hiring a Luton van, borrowing the equipment, and thereby economically and rapidly to test out the idea.

The total cost of the trial was estimated at £12000 and this was kindly provided through grants from the Happold Foundation and the Inter-Action Trust. The machines – a laser cutter and a 3D printer loaned by Hobarts Lasers, and a vacuum former loaned by C R Clarke Ltd – were housed in the van, supplemented by other equipment and resources from DE's existing stocks. Software was donated by Techsoft and seven laptops were loaned by Inter-Action/Fab Foundation UK.

Project programme

The project divided into five phases: Planning, sales, resourcing, delivery, and evaluation.

- 1. Planning: Starting over the summer holidays, a timeline was developed based on delivering 10 DTT Days in 10 schools over a five week period, building from possibly 1 per week at the outset to 3 per week by the end of the trial. The days were to be provided free of charge, but if additional days were requested at a given school, then these would be charged at £350 per day plus a £50 contribution to the cost of resources.**
- 2. Sales: The DE Programmes Manager, Charlotte Ennor, developed a list of target schools, made up of both schools from DE's existing client list and new prospects. From the outset, the policy was to contact only Primary schools, as past experience had shown that they were more able than Secondary schools to respond quickly to this kind of approach and that the curriculum imperative for Years 5 & 6 was much stronger. Head teachers were thus contacted by email, letter and phone in the last two weeks of the summer holiday.**
- 3. Resourcing: In line with the sales programme, staff were sought and outline Schemes of Work developed from which resource lists were extracted. Reuben Kettle Airs, a product designer with experience of delivering educational**

activities in schools during his recent employment at Dyson, was engaged as a self-employed Project Worker on a 3 day per week basis.

4. **Delivery:** Each school that responded positively to the sales enquiry was visited and the site surveyed for suitability. The schools had to provide a room separate from the classroom where up to 15 Year 6 pupils could sit, plus space for the DE machines. In the end, DE ran twelve DTT Days in nine schools, five of which were new to DE. In addition, after the trial finished, DE used the laser cutter and the vacuum former to run two days of activities with fourteen disabled young adults for its existing client, Action on Disability.
5. **Evaluation:** This is where we are now. Evaluation forms from 342 pupils and 26 teachers and teaching assistants are now being analysed. In addition, all DE staff involved in the project will meet and share their views of the project before a comprehensive feedback / feedforward report is prepared.



The Truck and the Team – Charlotte Ennor, David Baker & Reuben Kettle Airs



The Breakfast Club room at Old Oak Primary, comfortably arranged for 15 pupils. Note our machines lined up on the back wall, plus projector and flipchart – an ideal arrangement



... with the assistance of the caretaker and a shopping trolley at St Pauls Primary School



The smallest space we worked in – ‘the Hut’ at Ark Bentworth, just large enough for 10 pupils and our machines

