

**Invitation to Tender for** **Research**

**‘Inspired by Industry KS3 Teaching Contexts’**

**Introduction**

The Design & Technology Association is the professional body for design and technology education nationally and with reach overseas. For the last six years, we have been working on a programme of work aimed at ‘revisioning’ the subject and arresting the decline in GCSE and A Level entries that has seen us fall from a high of 430,000 GCSE entries to 78,000 and an A Level drop from 26,000 entries to just over 10,000 over the same period.

Our work started with the EPI research paper [‘A Spotlight on Design and Technology Study in England’,](https://epi.org.uk/publications-and-research/a-spotlight-on-design-and-technology-study-in-england/) released in March 2022. This research gathered information and facts that, until this time, were fragmented and collated these in one place. It is admittedly a somewhat depressing document to read but served to provide an inarguable baseline for the subject. If you like, a platform on which to build.

Leading on from this, in the summer of 2022, we released our thought paper ‘Reimagining D&T-Final Report’. This report gathered data, opinions and perceptions from teachers, school and sector leaders and government bodies, and we took this ‘on the road’ around the UK to gather thoughts and observations from all stakeholders.

Further consultation and research led to changes and adaptations within this document and a new version of ‘[Reimagining D&T’](https://www.designtechnology.org.uk/campaigns/reimagining-design-and-technology/) was released in the summer of 2023. By this time, over 500 stakeholders had fed into this consultation. We are confident that this document represents a carefully considered view of where the subject currently stands, and the actions required to place it back at the core of the English schools’ curriculum.

Over the same period, we worked closely with the IET to align our work with theirs on their [‘Engineering Kids Futures’](https://www.theiet.org/media/campaigns/engineering-kids-futures/) initiative.

Last July, we gave evidence in person to the House of Lords Education for 11-16 Committee, and we were heartened to see many of our requests to the Government being reflected within the subsequent report [‘Requires Improvement: urgent change for 11-16 education’](https://committees.parliament.uk/publications/42484/documents/211201/default/).

More recently, we have been instrumental in working with the Design Council and a team of educators and lead partners from across sectors to produce “A Blueprint for Renewal Design & Technology Education” [bit.ly/4cG09Br](https://bit.ly/4cG09Br)

**What is ‘Inspired by Industry’, and why is it needed?**

‘Inspired by Industry’ is a series of free-to-use design ‘contexts’ set in collaboration with industry partners explicitly aimed at 11–14-year-old students and their teachers. The objectives set for this work are ambitious; we aim to build upon the growth of design and technology education at primary level to change pedagogy slowly but surely at KS3 from one which is focused too highly on making and the end-product and insufficiently on context and enabling young people to build their knowledge and skill base through tackling real-world problems. These are hosted at: [www.InspiredbyIndustry.org.uk](http://www.InspiredbyIndustry.org.uk)

‘Inspired by Industry’ put quite simply, takes a real problem being tackled by industry professionals, scales this (without dumbing it down) so that it is suitable for 11-14-year-olds to tackle, maps the learning to the National Curriculum, and then supports this unit of learning with short clips of video with professionals talking about how they tackled the problem and associated curriculum materials to support both the teacher and the student in effectively delivering each unit. All support materials (except video content) are editable so the school can adjust to their students’ needs.

The units are scaffolded quite heavily with support materials in year seven, less so in year eight, and less so again in year nine. Each unit comes with additional materials behind a membership paywall, providing a further reason to join the Association as a member. It should, however, be stated that each unit is fully deliverable using the free materials alone; this is a conscious decision to ensure no school is excluded from utilising these resources for financial reasons.

We plan to run free webinars and free/low-cost in-person training to assist teachers in adopting this work and incorporating it into their school curriculum offer.

Over time, we believe that the adaptation of these units of work (which will be added to yearly) will add additional challenge to KS3 design and technology and will move us away from a culture where the end product is everything, to a more balanced design and problem-solving-based culture.

**Details of research required**

Through anecdotal research and conversations with FE/HE and industry, we firmly believe this approach best suits the requirements of modern society and HE/industry needs. We need to methodically explore and, through research, determine if this approach adds additional challenge to students and allows teachers to improve student engagement and facilitate faster progress across the Key Stage.

We view this as an eighteen-month project within which we measure schools adopting this learning alongside anonymised ‘comparative’ groups delivering a more traditional curriculum. We wish to measure the following areas within this research:

* **Student engagement** – Does this work encourage greater student engagement in the subject? If successful, this should ultimately result in higher take-up levels at GCSE but could be measured in the shorter term through questionnaires and student interviews.
* **Student progress** – Each unit is mapped to NC coverage, so it should be possible to map the rate of student progress compared to that which came before the unit’s introduction. Are students making faster progress and/or progressing to higher than anticipated levels of achievement?
* **Parental perception of the subject** – This is not a significant focus area for research, but we would like to ascertain if this work positively affects parental perception of the subject and its value on the school curriculum. We are assuming this could be achieved through focused online workshops/questionnaires.
* **Any variations around this work across a wider range of inclusion perspectives** – this should include gender (specifically the engagement of girls which we believe may improve through the introduction of this work), the engagement and progress of students from a range of socio-economic backgrounds and its impact on neurodiversity.
* **Teacher observations and professional desire to adopt further units into their curriculum offer –** Measured through surveys, baseline/end of unit tests and questionnaires.
* **Does the adoption of this work assist the creation of a more inclusive curriculum, allowing students to more easily relate to the work and add to their own ‘lived experience’** Measured through surveys, baseline/end of unit tests and questionnaires.

**Duration**

We would like to start this as soon as feasibly possible this year, and we see it running for eighteen months, allowing schools to be measured through at least two different unit iterations.

**Budget**

A budget of £27,500 has been made available as a result of funding agreed by Enginuity, Atkins Realis and Assettagz. Research should provide staged feedback throughout the project, a final written report published by an agreed deadline, and all ethical and data clearance to allow us to fully utilise the outcomes of this research project with the DfE and others.

**How to submit your tender**

Your tender needs to cover the following:

* Why is your organisation interested in undertaking this work?
* Evidence that you have carried out similar research and are well-placed to meet the stated research objectives
* What methodology do you plan to use detailing any proposed differences from that outlined within this tender
* When do you plan to provide interim reports? What format will these take, and the date for the final report (assume a mid-October 2024 start)
* Details of staff and their background of who will work on the project including detail of who will lead this project for your organisation (CV to be included)
* A full breakdown of all costs and a project timeline (including a note if VAT will be charged, and if so, whether the fees quoted are including or excluding VAT)

Your tender should be submitted by 5.00pm on Wednesday, 25th September, for the attention of:

Brenda van Beijnum

Operations and Finance Manager

brenda.vanbeijnum@designtechnology.org.uk

**Selection process**

Tenders will be reviewed by a professional panel, and credible organisations that have submitted high-quality bids will be selected to attend a virtual meeting to discuss this in further detail week beginning 30th September (date and time to be agreed).

We expect to award the tender to the successful organisation no later than Friday 4th October 2024.