

# The future of D&T is in the hands of the teachers teaching design and technology

## *Discussion Panel Short Paper*

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### *Abstract*

Some observations of D&T practice in schools; working to identify and develop good practice that helps to make D&T a valued subject in secondary schools.

*Keywords: school experience, progress 8, EBacc, ITT ECF, secondary D&T teachers*

## 1. A CONTEXT

My philosophy of student teachers is that they are students of education therefore I take the stance of Initial Teacher Education (ITE) rather than Initial Teacher Training (ITT), which is what the government push for. As a design and technology (D&T) teacher educator, my aim is to help new teachers be inspirational, creative with good subject knowledge and have the underpinning education knowledge to use in the classroom as well as understand how children learn. I work with post graduate secondary D&T teacher apprentices, and I also teach D&T to non-specialist undergraduate and postgraduate Primary ITE students. To build on previous knowledge I ask the students about their school experiences of D&T and the feedback is mixed. The primary students whose experiences were not so good, I have work harder with to get them to understand the value of D&T.

From secondary D&T departments and secondary student teachers, I hear about and see the marginalisation of D&T and the time restrictions as children move upwards in Key Stage three (KS3). This impacts on the D&T curriculum and teacher workload. A D&T KS3 curriculum has to be developed by the teachers to fit in with the timings given and adjust the teaching content to allow for a manageable workload for teachers as they have to teach more groups in less time. In some cases, this has resulted in practices such as a booklet driven curriculum, powerpoint driven curriculum and/or mainly project based work. Some schools have large numbers of children working in a small practical space. This information is based on the feedback I get from my primary undergraduate students, most of whom are 18 years old, with the most recent experience from the other side of the desk at secondary schools. There were many good and not so good examples: one very disappointing example is that I still hear from a few of my undergraduate students and their parents when they come for open days, that D&T is a subject for manual work. Another, unfitting example was where the children did just one project for one whole academic year accompanied with the statement, *'I learned nothing in D&T; every week for I waited an hour for the teacher to come and help me and it never happened.'* It is difficult for teachers – there is staff absences and children's absences that impact on progression and with the time restrictions, there is very little room to catch up with any study that is missed. Teachers have shared how difficult it is to prepare KS3 children for the start their GCSE study with the time restriction on KS3.

This is what many secondary D&T student teachers are experiencing, and secondary children are receiving.

In some schools, D&T teachers have been more creative with the curriculum and pedagogy to use that limited time by creating shorter tasks, utilising a range of D&T pedagogies, framed with support materials to ensure all pupils can complete their work. In a few schools, the time allocated to all foundation subjects is equally divided which is what all schools should be doing in this age of equality.

There are many routes into teacher education are HEI ITE, School Centred ITT (SCITT) and Employment Based ITT (EBITT). Yet teacher shortages continue to increase, and teacher education applications continue to fall in the UK (NFER, 2025). As student numbers drop, many HEI D&T ITE courses became unviable to run and many HEIs no longer support the training for D&T ITE due to costs. A worrying situation as the D&T HEI community gets smaller and subject expertise in teachers vary with the different philosophies and values in which the D&T curriculum is developed and practiced in the changing climate of education.

## **2. A SUMMARY OF HISTORY – MY PERCEPTION OF HOW WE GOT HERE**

In 2013 (updated: DfE 2019), the government introduced the English Baccalaureate (EBACC) and the Progress 8 measure (DfE 2014) with allocated different weightings for a selected list of subjects. These weightings measure schools' performance; D&T, as well as other arts subjects, did not have any weightings attached to them and were not included in the EBacc list. In order to get a higher Progress 8 measure, many schools decided to give more time to teach English and maths as these two subjects had double weighting. Time had to be taken from subjects that did not contribute to Progress 8 and were not included in the EBacc. That is how D&T lost time in the KS3 teaching phase in some schools.

Since the introduction of the national curriculum in 1987, there is an increasing government control of education and ITT/E. In 2008 the first teachers' standards for qualified teacher status (QTS) were introduced (revised by DfE in 2011 and now replaced with ITT ECF DfE.2024). HMIs (His/her Majesty's Inspectors) supported schools from the 1840s and were replaced with Ofsted in 1997. Ofsted inspected and graded schools and teacher education providers rather than supporting them. (Parliament UK, no date)

Without going into a detailed turbulent history, HEI based qualifications for teachers were introduced in 1890. School based training dominated in the nineteenth century, and HEI based training was more common in the twentieth century (Robinson, 2006). There were noticeable tensions and hostility toward HEIs during the 1990s. Despite the 1998 Ofsted report on SCITTs was graded as unsatisfactory, the government continued to fund and create more SCITTs, resulting in an uncertainty of government education ideology and reduction in the student teachers for HEI. It has taken more than 20 years to read positive Ofsted reports for SCITTs.

## **3. HOW DO WE MOVE FORWARD**

The future of D&T is in the hands of the teachers teaching design and technology, particularly in secondary schools.

Most student teachers have school placements regardless of where they have chosen to study education. It is important the D&T subject specialists such as the heads of department, classroom teachers and support staff have a personal philosophy of the subject and understand the value and complex nature of the knowledge and skills related to the subject. D&T teams in school need to engage with Continued Professional Development (CPD) to continue to build on subject knowledge. They need to have a passion and curiosity for their subject, that they can share with the children they teach and student teachers who see them as 'classroom gurus' during school placements. D&T teams need to engage in debate and share good practice within and outside their teams. Look for ideas on the many digital platforms with careful scrutiny as not everything that is shared/published is necessarily good. They need to look at literature to gain a wider perspective and identify characteristics of good practice in secondary schools (HMSO 1995). Many D&T teachers are already doing this but there are departments where practice is stagnant.

Where practice is good, the subject is valued, and complexities of the content knowledge are evident to everyone in and out of school. There is evidence of good quality work displayed around school. Where practice is not so good, often it is regarded as a simplistic and unchallenging subject where there is little to develop and mostly regarded as skills-based learning. So, planning the KS3 curriculum with restricted time is a challenge for almost all secondary teachers.

Teachers are busy and need to create time to evaluate, critique and develop their curriculum yearly; look and think about what makes a quality D&T curriculum. Every year make manageable changes to improve what is being experienced of the children they teach. At secondary level education, children are also being prepared for the world of work and what are the skills that employers are looking for? How can these be integrated into classroom work? Children will take their experience of the subject learning and talk about it to the world outside school. Parents will hear about what they are doing in school and some of these parents might be influential in the community or industry. There is a difference between 20 years of teaching experience and one year of teaching repeated 20 times. Progression in curriculum planning is an important of a teacher's role.

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