

Blending Tradition and Innovation

Mike Mellors, Lead Practitioner for Design and Technology and Head of Section at The Dixie Grammar School

By merging education with real-world industry practices, integrating technology like virtual reality, and designing a collaborative learning environment, the D&T team is inspiring students to think creatively and engage actively. The goal at the Dixie Grammar School is to prepare well-rounded, adaptable students ready to meet future challenges with confidence.

Sixteen years into my career in education, having honed my skills at The Fernwood School in Nottingham, I now proudly form part of the D&T team at The Dixie Grammar School, Market Bosworth. Dixie is a school offering education from ages 3 to 18, rooted in strong academic principles with a progressive approach to learning.

Our goal is both simple and ambitious - to prepare and inspire well rounded students for a modern, sustainable world. Over the past four years, we have thoroughly reviewed our curriculum and restructured our approach to teaching and learning, with a strong focus on bridging the gap between education and industry.

By integrating current STEM practices and the latest pedagogical research, we are committed to equipping students with critical, lateral, and practical skills.

Department Vision

It would be impossible for you to be reading this article without the contributions of D&T.

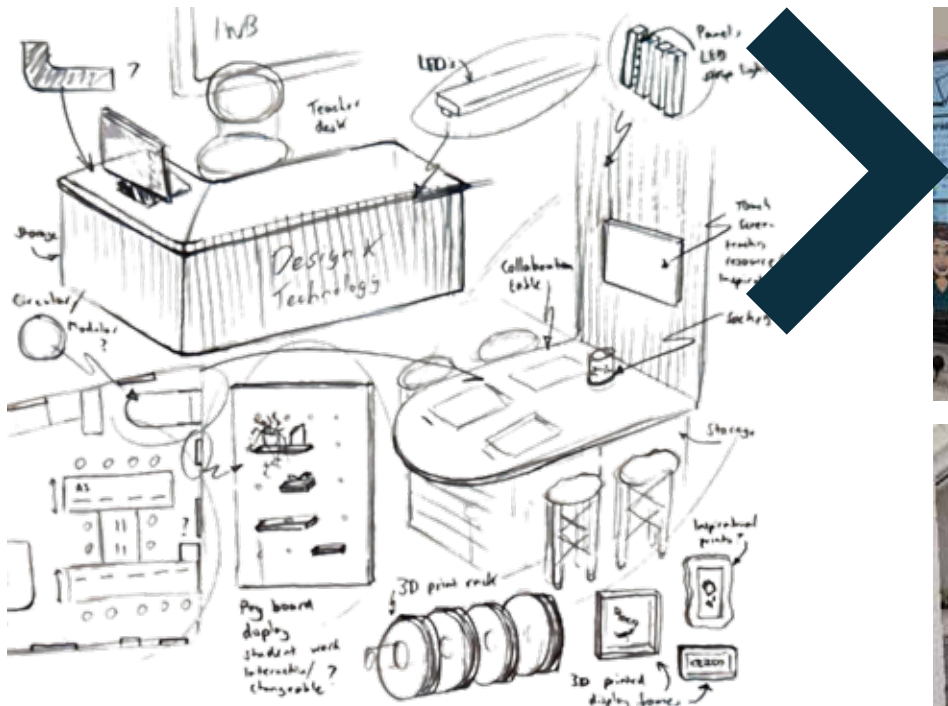
The device you're using, the car you drive, the design of the room you're sitting in - these all rely on creative problem-solving from the minds of designers and engineers. Science and mathematics provide the theories, but D&T turns them into reality. It's a subject that equips students with skills like resilience, teamwork and innovation.

Revamping the Curriculum and Climate for Learning

Recognising the ever-changing landscape of industry and technology, we knew our curriculum needed a refresh. After an extensive review, as a team we developed a new progression framework that clearly maps out what we expect from our students - from Year 6 all the way to Year 13. This includes differentiated outcomes for both lower and higher-ability students, ensuring that all learners are supported and challenged.

We also revamped our learning environment. With the strong support of our Headteacher and the school PTA, we rebranded and redesigned our classrooms to reflect a more modern, inspiring space. This included the transformation of our old 'Graphics Room' into what we now proudly call The Design Studio.

Our new Design Studio wasn't just a top-down decision. True to D&T's iterative process (and keen to practice what we preach!), we brainstormed ideas, sketched out designs, and gathered feedback from students. Using research from the Education Endowment Foundation (EEF) and insights on collaborative learning from @TeacherToolkit, we ensured that the space would foster curiosity and active participation. The room layout aligns with our educational school values of respect, resilience, courage, commitment, and care, creating an environment that inspires confidence and effective communication.



Initial Layout Sketch



Bringing the Vision to Life with VR and Collaboration

In collaboration with our Head of Computing, Mr K. Gold, and our Head of D&T, Mrs N. Pike, we pitched a bold idea to integrate virtual reality into our departments. Our pitch was a success, and thanks to the generous support of the PTA, we acquired five of the latest Meta Quest 3 headsets. These tools have added an exciting new dimension to our curriculum offering, enabling students to visualise their ideas in a fully immersive environment.

When redesigning The Design Studio, we took full advantage of these VR headsets, using the 'Gravity Sketch' app to model our ideas. We were first introduced to VR by Priten Chauhan, who specialises in VR training in schools. This process allowed us to explore layouts in a 3D virtual space, enabling key stakeholders, including our Headteacher, to experience the room before a single piece of furniture was moved.

Our ICT services and premises team were involved in discussions around networking, power sockets, and future-proofing the space. By leveraging both technology and teamwork, we've created a Design Studio that blends modern resources with a creative learning environment. The studio now features a collaborative workspace, industry-standard software and a dedicated CAD/CAM area.

Inspiring the Future

Feedback from stakeholders has been overwhelmingly positive so far, and we're excited to further enhance the Design Studio with new technologies, such as touchscreens and interactive displays. With these resources, we aim to continue sparking curiosity and ingenuity in our students, helping them meet their full potential. We're also planning an exciting new 'Immersion Day', designed to immerse students in the world of design utilising our new space.

As I reflect on our journey at Dixie, I'm reminded that D&T is more than just a subject, it's a mindset. The ability to think laterally, to bridge the gap between theory and practice, and to embrace collaboration.

Virtual Classroom

Every element in the room is hyperlinked, allowing students to click on nearly anything, a wall poster, a book on the shelf, or a plant and be instantly taken to useful resources. Some objects link to Google Drive folders filled with course materials, while others lead to inspirational content like design projects, video tutorials, or revision tools. It's a digital learning environment where students can independently explore, discover, and engage with everything they need to support their coursework.

Links



Gravity Sketch App
gravitysketch.com/



Priten Chauhan
www.linkedin.com/in/pritenchauhan/?originalSubdomain=ukEducation
Endowment Foundation (EEF)
https://educationendowmentfoundation.org.uk/



The Dixie Grammar School
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