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Final Version

Key Questions for Design and Technology Teachers

**Thinking, reflection and motivation**

**Key Questions for Design and Technology Teachers**

• Do teachers plan collaboratively in order to create a shared understanding of the learning journey? Do teachers discuss pupils’ learning along the way, reflecting on pedagogy and impact?

• Do pupils and teachers recognise the wide range of approaches to feedback or is written marking the main form of feedback? Do teachers seek out Disadvantaged pupils to ensure that they understand the feedback given and know how to act upon it? Is assessment of Disadvantaged pupils’ work specifically used to inform planning and next teaching?

• Are there opportunities for collaborative book looks, marking, and moderation of outcomes in order to discuss pupil needs and next steps for teaching?

• How is the effectiveness of planning and teaching in Design and Technology evaluated? Is assessment used to refine planning for the future as well as to identify next steps for pupils?

• How do teachers model the thinking process behind designing and making in order to make the learning visible?

• Do pupils work collaboratively so that they can think aloud with one another? What other opportunities do you create for collaborative working?

• Is dialogic talk an integral element of your teaching and learning repertoire? How do you develop pupils’ talk for learning?

• Is questioning used skilfully to check knowledge and understanding identify and address misconceptions in Design and Technology and challenge pupils?

Are pupils encouraged to ask questions when unsure, challenge their own ideas and show an interest that deepens their knowledge and understanding of Design and Technology?

• Do pupils seek feedback to improve further? Do your disadvantaged pupils complete the same amount of work to a high standard and how is this addressed if not?

How do you celebrate excellence in pupils’ work?

**Whole school culture and engagement**

**Key Questions for Design and Technology Teachers**

* Has a shared vision for Design and Technology within the school been clearly established and is this embodied in your curriculum design?
* Is subject-specific action planning informed by: whole school priorities; robust self-evaluation; monitoring activities such as work scrutiny and learning walks; research findings; the views of stakeholders?
* How is the Design and Technology action plan taken off paper and into the classroom, with all teachers understanding and fulfilling their role?
* Are there opportunities for teachers to develop their subject knowledge and elements of their practice, e.g. through research groups, Lesson Study and collaborative planning.
* Are there opportunities for teachers to nurture their passion for Design and Technology, understanding their own learning as technologist and designers, e.g. through workshops and clubs?
* How are the strengths of different staff capitalised upon, e.g. through peer coaching, joint planning/marking, careful deployment of staff to meet identified pupil needs?
* How are staffing decisions made to best meet the needs of pupils and ensure long-term progress for all pupil cohorts?
* Are teachers enabled to observe each other’s teaching for reflective and developmental purposes, rather than performance management purposes?
* Is there a culture of informal professional dialogue within (and across) subject areas? Do teachers feel comfortable to take risks and constantly reflect on teaching and learning, including mistakes and failures?
* Are subject-specific pedagogical ideas and research findings explored at staff meetings?
* Are projects chosen that both reflect and challenge values, attitudes and experiences linked to the local community? Do designers selected offer positive role models and inspiration for all pupils?
* Are pupils involved in making choices about the Design and Technology curriculum, e.g. areas studied different disciplines and mixed material areas.

**Potential, Pitch and Progression**

**Key Questions for Design and Technology Teachers**

• What format/approach is used to pass on Design and Technology transition information between year groups/key stages? Is this designed to identify skills and knowledge gaps precisely so that teachers can effectively build on prior learning and teach gaps in knowledge, skills and understanding?

• Do teachers primarily use data to inform teaching and learning? Do teachers use a wide range of assessment information when making judgements about a pupil’s attainment (E.g. teaching pupils for a number of lessons rather than baseline testing or using classwork in addition to more formal assessment/test-based outcomes?)

• Are age-related expectations in Design and Technology clearly identified, defined and exemplified in order to ensure that pupils and teachers alike know what success looks like in each year group? Are these expectations built on a clear understanding of previous key stages/year groups, and not just the next national assessment point? What are the non-negotiable skills for each year group that nearly all pupils will achieve?

 • How well do teachers understand the way the curriculum has been taught in previous years? Are they aware of the topics that have been studied and skills learnt? Do teachers have transition conversations about how key skills and concepts have been explained and the examples that have been used to support pupils’ working memory? Do teachers have a shared language to describe key concepts that will help pupils to see how their learning is progressing and to make connections to prior learning?

• Is the curriculum rich and balanced to include a wide range of design specifications to inform the design of innovative, functional, appealing products? Consider the balance of different approaches to generating, developing, modelling and communicating ideas.

• How do you group pupils, and how are these decisions made? Do all pupils, across the range of classes, have access to the curriculum, pitch and expectation required to meet age-related expectations, or is pupil grouping a limiting factor?

• Do all pupils, across the range of classes, have access to effective pedagogy shown to have impact, or does pedagogy differ across classes? For example, if setting, does the bottom set have the same access to rich talk and discussion as the top set? If not, how might you look to move towards more equitable groupings?

• Do teachers provide a range of modelled, shared, guided and independent reading and writing opportunities, driven by rich contexts?

• How do teachers both address specific curriculum gaps and develop further skills, knowledge and understanding so that pupils do not get left behind? (e.g. how might teachers support pupils with difficulties in understanding contexts, users and purposes, while ensuring that these pupils are encouraged to develop their skills in modelling and communication ideas)? What approaches make this possible? Where is this most successful?

How precisely planned and targeted are interventions for skills and knowledge gaps from earlier years (e.g. Developing 3D CAD and using specialist equipment to measure and mark-out? Do teachers of older year groups know how to teach these skills effectively?

• How is teaching adapted to ensure that pupils are supported to meet learning objectives? Are flexible groupings used to address misconceptions and gaps in learning?

• How do teachers plan for initial weeks of each year to understand the pupils’ prior learning and to secure and build on the learning from the previous year? What pedagogy is best used to drive this learning journey?

**Access, equity and strong foundations**

**Key Questions for Design and Technology Teachers**

* Are barriers to learning for disadvantaged pupils understood by teachers?
* How are teachers adapting practice to meet the needs of their pupils?
* Do parents feel welcome within the school/Design and Technology department? Is there regular positive contact between the school and parents?
* What steps are taken to engage parents with the Design and Technology curriculum? Are parents encouraged to enjoy and participate in Design and Technology activities (e.g. visits to places of interest, exploring how things work, competitions, clubs, exciting and engaging homework)? Are there opportunities for parents to explore how to support their children’s learning at home (e.g. answering student’s questionnaires, model making, questioning skills, revision sessions)?
* What strategies are used to help pupils to develop their skills and knowledge? Do teachers consciously create regular and cumulative opportunities to build on skills and knowledge?
* What extra-curricular activities and experiences are available to pupils? Are pupils offered opportunities to experience and meet with designers, engineers and chefs, visit the work of key designers, visit studios and workshops, participate in workshops, visit universities to explore degrees in Design and Technology, Engineering, Fashion, Textiles, Electronics, Graphics and Food and Nutrition?
* When planning learning journeys, how do teachers plan to address gaps in pupils’ experiences and contextual knowledge in order to ensure that they are able to access the curriculum studied?
* Are teachers aware of pupils’ language needs and ways to support pupils with speech, language and communication needs in the classroom?
* How are pupils’ skills in discussion and presentation developed, including the use of Standard English in formal contexts? How is pupils’ confidence to speak and contribute to discussion developed? Are pupils’ contributions and questions structured, welcomed, valued and tested? Are pupils encouraged to speak publicly before real audiences?
* How is reading fluency developed? Are pupils given opportunities and support to develop fluent reading so that they are able to focus on comprehension?
* How is writing fluency developed? Are pupils supported to build stamina, speed and automaticity so that they are able to focus on composition and effect?
* How is reading for pleasure encouraged? Does the school have a vibrant reading culture? Are pupils guided to choose books that they might enjoy? Do pupils recommend books to each other? Do teachers deliberately engage pupils in conversation about their reading and lend pupils books based around Design and Technology?
* Are pupils supported to complete their homework for Design and Technology without seeing homework as a punishment?
* How is pedagogy shared across the whole school? Do all teachers have a clear understanding of ways to support pupils’ access to texts and high quality writing?

# Design and Technology

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