

## **Design & Technology (D&T) Survey Visits**

### **Generic grade descriptors and supplementary subject-specific guidance for inspectors on making judgements during visits to schools**

Subject feedback letters, following survey visits, normally contain separate judgements on:

- the achievement of pupils in the subject
- the quality of teaching in the subject
- the quality of the curriculum in the subject
- the quality of leadership and management of the subject
- the overall effectiveness of the subject.

In coming to these judgements, inspectors will use the relevant criteria and grade descriptors from the 2012 Section 5 evaluation schedule as they can be applied to individual subjects. Key elements of these descriptors are set out in the left-hand columns in the following pages though inspectors may refer to the whole section 5 evaluation schedule where appropriate. Alongside them (for achievement, teaching, the curriculum and leadership and management) are supplementary, subject-specific descriptors which provide additional guidance for D&T. These descriptors should be applied in a way which is appropriate to the age of pupils involved. Except where otherwise indicated, descriptors are intended to be used on a 'best fit' basis.

It is important to note that this guidance is intended only to inform the judgements made by specialist inspectors carrying out subject survey visits. It is not for use on Section 5 whole-school inspections.

## Grade descriptors:<sup>1</sup> achievement of pupils in D&T

	Generic	Supplementary subject-specific
1	<p><b>Outstanding</b></p> <p>Almost all pupils, including, where applicable, disabled pupils and those with special educational needs, are making rapid and sustained progress in the subject over time given their starting points. They learn exceptionally well and as a result acquire knowledge quickly and in depth, including in the sixth form and areas of learning in the Early Years Foundation Stage. They develop and apply a wide range of skills to great effect, including reading, writing, communication and mathematical skills that will ensure they are exceptionally well prepared for the next stage in their education, training or employment. The standards of attainment of almost all groups of pupils are likely to be at least in line with national averages for all pupils with many above average. In exceptional circumstances, where standards of attainment of any group of pupils are below those of all pupils nationally, the gap is closing dramatically over a period of time.</p>	<p>Pupils demonstrate excellent attitudes to learning and working independently. They carry out their own research and investigations and are able to think for themselves. They take the initiative in, for example, asking questions and developing an exceptionally detailed knowledge of user's needs and the context for their work. They use time efficiently and make good use of computer aided design and manufacture (CAD/CAM). They manage risks exceptionally well to safely manufacture products and consider suitability for users. They work constructively with others. Pupils have an excellent knowledge of modern material use and keep pace with technological advances. They apply scientific, mathematical and engineering knowledge to create products which are functional. They exploit this well when making choices and taking decisions about all aspects of their work. Pupils show significant levels of originality, imagination or creativity in their understanding and skills. They respond to ambitious challenges, and produce ideas and manufacture prototypes that are varied and innovative. They develop a sense of passion and commitment to the subject.</p>
2	<p><b>Good</b></p> <p>Pupils are making better progress than all pupils nationally in the subject given their starting points. Groups of pupils, including disabled pupils and those with special educational needs, are also making better progress than similar groups of pupils nationally. Pupils acquire knowledge quickly and are secure in their understanding of the subject. They develop and apply a range of skills well, including reading, writing, communication and mathematical skills that will ensure they are well prepared for the next stage in their education, training or employment. The standards of attainment of the large majority of groups of pupils are likely to be at least in line with national averages for all pupils. Where standards of any group of pupils are below those of all pupils nationally, the gaps are closing. In exceptional circumstances, where attainment is low overall, it is improving at a faster rate than nationally over a sustained period.</p>	<p>Pupils are able to work independently and take the initiative in their work with others. Thoughts and ideas are well demonstrated: for example, pupils' analysis of research is highly pertinent and is used efficiently to test the effectiveness of their product. The suitability for users is embedded in all aspects of their designing and making. They demonstrate originality, imagination or creativity in their D&amp;T work and realise their ideas and plans accurately and safely. Pupils have a good knowledge of modern material use and they use ICT and particularly CAD/CAM effectively. Pupils draw upon their knowledge of scientific and mathematical knowledge to inform their designing and making. They enjoy D&amp;T and can explain its value.</p>
3	<p><b>Satisfactory</b></p> <p>Pupils are progressing at least as well in the subject as all pupils nationally given their starting points. Groups of pupils, including disabled pupils and those with special educational needs, are also making progress in line with similar groups of pupils nationally. Pupils generally learn well in the subject, with no major weaknesses. They acquire the knowledge, understanding and skills, including those in reading, writing, communication and mathematics that will ensure they are prepared adequately for the next stage in their education, training or employment. The standards of attainment of the majority of groups of pupils are likely to be in line with national averages for all pupils. Where standards of groups of pupils are below those of all pupils nationally, the gaps are closing overall. In exceptional circumstances, where attainment is low overall, it is improving over a sustained period.</p>	<p>Pupils are generally dependent on their teachers but can occasionally work independently and take the initiative in developing their work. Occasionally pupils show creative or original responses in their D&amp;T work. Some consideration is given to user needs, but technological understanding and testing are rudimentary. Pupils are generally motivated well, are proud of the things they make, follow instructions and act safely. Pupils have an awareness of modern material use and use CAD/CAM successfully.</p>
4	<p><b>Inadequate</b></p> <p>Achievement in the subject is likely to be inadequate if any</p>	<p>Pupils infrequently show the ability to work independently, make choices, take design decisions or plan their work.</p>

<sup>1</sup> Grade descriptors are not to be used as a checklist but should be applied adopting a 'best fit' approach.

	<p>of the following apply.</p> <ul style="list-style-type: none"> <li>■ Pupils' learning and progress, or the learning and progress of particular groups, is consistently below those of all pupils nationally given their starting point.</li> <li>■ Learning and progress in any key stage, including the sixth form, lead to underachievement.</li> <li>■ The learning, quality of work and progress of disabled pupils and those with special educational needs show that this group is underachieving.</li> <li>■ Pupils' communication skills, including in reading and writing and proficiency in mathematics overall, or those of particular groups, are not sufficient for the next stage of education or training.</li> <li>■ Attainment is consistently low showing little, fragile or inconsistent improvement, or is in decline.</li> <li>■ There are wide gaps in attainment and in learning and progress between different groups of pupils and of all pupils nationally that are showing little sign of closing or are widening.</li> </ul>	<p>They may lack interest or enthusiasm and see little relevance in completing their work. Pupils rarely demonstrate creativity or originality when designing and making. The needs of users and technological understanding are seldom considered. Consequently designing may be formulaic or predictable and products made with crude technical skills.</p>
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### Grade descriptors:<sup>2</sup> the quality of teaching in D&T<sup>3</sup>

	<b>Generic</b>	<b>Supplementary subject-specific</b>
<b>1</b>	<p><b>Outstanding</b></p> <p>Much of the teaching in the subject is outstanding and never less than consistently good. As a result, almost all pupils are making rapid and sustained progress. All teachers have consistently high expectations of all pupils. Drawing on excellent subject knowledge, teachers plan astutely and set challenging tasks based on systematic, accurate assessment of pupils' prior skills, knowledge and understanding. They use well judged and often imaginative teaching strategies that, together with sharply focused and timely support and intervention, match individual needs accurately. Consequently, pupils learn exceptionally well. Teaching promotes pupils' high levels of resilience, confidence and independence when they tackle challenging activities. Teachers systematically and effectively check pupils' understanding throughout lessons, anticipating where they may need to intervene and doing so with notable impact on the quality of learning. Time is used very well and every opportunity is taken to successfully develop crucial skills, including being able to use their literacy and numeracy skills. Appropriate and regular homework contributes very well to pupils' learning. Marking and constructive feedback from teachers and pupils are frequent and of a consistently high quality, leading to high levels of engagement and interest.</p>	<p>Teachers communicate high expectations, enthusiasm and passion about D&amp;T to pupils and challenge their thinking. They have a high level of confidence and expertise both in terms of their up-to-date specialist knowledge and their understanding of effective learning in D&amp;T. As a result, they employ a very wide range of innovative and imaginative resources and teaching strategies to stimulate pupils' active participation in their learning. This enables pupils to explain their ideas and concepts clearly and apply them with confidence. Opportunities for pupils to develop and demonstrate their initiative and independence and take responsibility for their learning are thoughtfully planned and secure outstanding progress across all aspects of D&amp;T.</p>
<b>2</b>	<p><b>Good</b></p> <p>As a result of teaching that is mainly good, with examples of outstanding teaching, most pupils and groups of pupils, including disabled pupils and those who have special educational needs, are achieving well in the subject over time. Teachers have high expectations of all pupils. Teachers use their well developed subject knowledge and their accurate assessment of pupils' prior skills, knowledge and understanding to plan effectively and set challenging tasks. They use effective teaching strategies that, together with appropriately targeted support and intervention, match most pupils' individual needs so that pupils learn well.</p>	<p>Teachers have a clear understanding of the value of D&amp;T and awareness of technological developments which they communicate effectively to pupils. They have a confident level of specialist expertise which they use well in planning and teaching D&amp;T in a well-organised environment. They make good use of teaching strategies and they plan and manage time and resources such as tools and CAD/CAM equipment efficiently to promote good learning across all aspects of D&amp;T.</p>

<sup>2</sup> Grade descriptors are not to be used as a checklist but should be applied adopting a 'best fit' approach.

<sup>3</sup> These grade descriptors describe the quality of teaching in the subject taking account of evidence over time. While they include some characteristics of individual lessons, they are not designed to be used to judge individual lessons.

	<p>Teaching generally promotes pupils' resilience, confidence and independence when tackling challenging activities. Teachers regularly listen astutely to, carefully observe and skilfully question groups of pupils and individuals during lessons in order to reshape tasks and explanations to improve learning. Teaching consistently deepens pupils' knowledge and understanding and teaches them a range of skills including literacy and numeracy skills. Appropriate and regular homework contributes well to pupils' learning. Teachers assess pupils' progress regularly and accurately and discuss assessments with them so that pupils know how well they have done and what they need to do to improve.</p>	
<p><b>3</b></p>	<p><b>Satisfactory</b></p> <p>Teaching results in most pupils, and groups of pupils, currently in the school making progress in the subject broadly in line with that made by pupils nationally with similar starting points. There is likely to be some good teaching and there are no endemic inadequacies across year groups or for particular groups of pupils. Teachers' expectations enable most pupils to work hard and achieve satisfactorily and encourage them to make progress. Due attention is often given to the careful assessment of pupils' learning but this is not always conducted rigorously enough and may result in some unnecessary repetition of work for pupils and tasks being planned and set that do not fully challenge. Teachers monitor pupils' work during lessons, picking up any general misconceptions and adjust their plans accordingly to support learning. These adaptations are usually successful but occasionally are not timely or relevant and this slows learning for some pupils. Teaching strategies ensure that the individual needs of pupils are usually met. Teachers carefully deploy any available additional support and set appropriate homework and these contribute reasonably well to the quality of learning for pupils, including disabled pupils and those who have special educational needs. Pupils are informed about the progress they are making and how to improve further through marking and dialogue with adults that is usually timely and encouraging. This approach ensures that most pupils want to work hard and improve.</p>	<p>Teachers understand how to maintain pupils' interest in D&amp;T. They have a sound level of subject expertise which they use in their planning and teaching. As a result, they use a range of resources and teaching strategies to promote a satisfactory level of learning across most aspects of the subject. Teachers manage lessons and complex tools and equipment, including ICT and CAD/CAM, accurately and safely.</p>
<p><b>4</b></p>	<p><b>Inadequate</b></p> <p>Teaching in the subject is likely to be inadequate where any of the following apply.</p> <ul style="list-style-type: none"> <li>■ As a result of weak teaching, pupils or groups of pupils currently in the school are making inadequate progress.</li> <li>■ Teachers do not have sufficiently high expectations and teaching over time fails to excite, enthuse, engage or motivate particular groups of pupils, including those who have special educational needs and/or disabilities.</li> <li>■ Pupils cannot communicate, read, write or use mathematics as well as they should, as appropriate, in the subject.</li> <li>■ Learning activities are not sufficiently well matched to the needs of pupils so that they make inadequate progress.</li> </ul>	<p>Teachers are not able to engage or sustain pupils' interest in D&amp;T. Their subject expertise is limited or outdated and, as a result, they do not provide the resources or teaching strategies to promote effective learning in D&amp;T. Activities occupy pupils and whilst there may be a general busyness within lessons, planning fails to promote their learning or ensure that safe working practices are applied. Opportunities for pupils to work independently are rare and lessons are over dominated by teacher demonstration or talk.</p>

## Grade descriptors: the curriculum in D&T<sup>4</sup>

	Generic <sup>5</sup>	Supplementary subject-specific
<b>1</b>	<p><b>Outstanding</b></p> <p>The curriculum in the subject provides highly positive, memorable experiences and rich opportunities for high quality learning, has a very positive impact on pupils' behaviour and, where appropriate, their safety, and contributes very well to pupils' achievement and, where appropriate, to their spiritual, moral, social and cultural development.</p>	<p>The imaginative and stimulating D&amp;T curriculum is skilfully designed to match to the full range of pupils' needs and to ensure highly effective continuity and progression in their learning. Pupils learning and engagement in D&amp;T are enriched and enhanced in meaningful ways through excellent links forged with other agencies, industry, the wider community and other subjects, particularly STEM subjects. Pupils are extremely well-informed about their current work, future projects and courses. In secondary schools, they are helped to understand the value of the subject to future careers in STEM or creative industries. Where appropriate, curriculum plans promote pupils' knowledge of current and new technologies and speculate about the issues and moral aspects that need to be considered when designing and making. Access to, and the use of resources, is exceptionally well planned and enables pupils to create innovative functional solutions to problems.</p>
<b>2</b>	<p><b>Good</b></p> <p>The curriculum in the subject provides well organised, imaginative and effective opportunities for learning for all groups of pupils including disabled pupils and those who have special educational needs, promotes positive behaviour and, where appropriate, their safety, and provides a broad range of experiences that contribute well to the pupils' achievement and, where appropriate, to their spiritual, moral, social and cultural development.</p>	<p>The curriculum is broad, balanced and exciting. It is well informed by current initiatives in D&amp;T. It is designed to match to a range of pupils' needs and ensure effective continuity and progression in their learning in D&amp;T. Good links are forged with other agencies and the wider community to provide a range of enrichment activities to promote pupils' learning and their engagement with D&amp;T. Effective links to other subjects, particularly STEM subjects, drive improvement in pupils' learning and their application of designing and making skills. Curriculum plans promote pupils' awareness of technological developments and issues and provide structured opportunities for pupils to apply their knowledge of manufacturing techniques to develop creative and innovative solutions to real problems.</p>
<b>3</b>	<p><b>Satisfactory</b></p> <p>The curriculum in the subject is generally matched to pupils' needs, interests and aspirations and provides adequate preparation for the next stage of their lives, whatever their starting points.</p>	<p>The curriculum secures the pupils' broad and balanced entitlement in D&amp;T and meets any statutory requirements that apply, for example to be able to learn about systems and control and to cook. It provides for a range of pupils' needs and ensures they make satisfactory progress to acquire capability in designing and making and to move forward securely to the next stage of learning. Pupils are aware of some inventions and products that they see in the world around them and draw upon them occasionally to develop their designing and making. Some links are forged with other agencies, the wider community, and other subjects, particularly STEM subjects, although the range of activity provided to enrich pupils' interest and learning may be quite limited.</p>
<b>4</b>	<p><b>Inadequate</b></p> <p>The curriculum in the subject fails to meet the needs of pupils or particular groups of pupils.</p>	<p>The curriculum does not ensure pupils' entitlement to D&amp;T and does not secure continuity in their learning. Pupils' learning, enjoyment or development as designers, makers or informed consumers is constrained by schemes of work which are too narrow or shallow. There is little by way of enrichment activity in the subject.</p>

<sup>4</sup> The generic grade descriptors are drawn from the leadership and management section of *The evaluation schedule for the inspection of schools and academies, January 2012*

## Grade descriptors:<sup>6</sup> quality of leadership and management of D&T

	Generic	Supplementary subject-specific
<b>1</b>	<p><b>Outstanding</b></p> <p>The pursuit of excellence in all activities relating to the subject is demonstrated by an uncompromising and highly successful drive to strongly improve achievement, or maintain the highest levels of achievement, for all pupils including disabled pupils and those who have special educational needs, over a sustained period of time. Actions are based on a deep and accurate understanding of performance in the subject. Key leaders focus relentlessly on improving teaching and learning, resulting in teaching that is likely to be outstanding and at least consistently good.</p>	<p>Leadership is informed by a high level of subject expertise and vision. There is a strong track record of innovation. Subject reviews, self-evaluation and improvement planning are well-informed by current best practice in D&amp;T and in education generally. D&amp;T leaders, and a widely shared subject vision, inspire confidence and whole-hearted commitment from pupils, parents and colleagues. There are effective strategies to delegate subject responsibilities where appropriate and to share good practice. High quality professional development in D&amp;T is secured and its effectiveness is clearly demonstrated. D&amp;T has a very high profile and is at the cutting edge of initiatives within the school. Accommodation, resources and working practices are well planned, safe and significantly support learning. Partnership with the wider community and communication with parents about how they can support their children's learning in D&amp;T are excellent.</p>
<b>2</b>	<p><b>Good</b></p> <p>Key leaders and managers consistently communicate high expectations and ambition in the subject. They model good practice and demonstrably work to monitor, improve and support teaching, encouraging the enthusiasm of staff and channelling their efforts and skills to good effect. As a result, teaching is improving and is at least satisfactory, with much that is good. Planned actions based on accurate self-evaluation to overcome weaknesses have been concerted and effective. As a result, achievement has improved or consolidated previous good performance.</p>	<p>Leadership is well-informed by current developments in D&amp;T. Subject reviews, self-evaluation and improvement planning are clearly focused on raising standards and improving the provision for D&amp;T. Pupils' and parents' feedback is regularly used to improve and develop D&amp;T, to keep it relevant and accessible to all. There is a shared common purpose amongst those involved in teaching D&amp;T with good opportunities to share and to refresh practice through regular subject training. D&amp;T reflects wider whole school priorities and has a prominent profile in the school. Good planning ensures accommodation, resources and safe working practices support learning effectively.</p>
<b>3</b>	<p><b>Satisfactory</b></p> <p>Key leaders and managers provide a concerted approach to improvement in the subject. Planned actions by leaders and managers have improved the quality of teaching so that very little is inadequate. Capacity to secure improvements in the subject is demonstrated by a trend of sustained improvement in achievement although a few significant weaknesses remain.</p>	<p>Leadership is aware of current developments in D&amp;T and incorporates these within its practice. Provision for D&amp;T is monitored and reviewed regularly and there is a sound understanding of the strengths and priorities for improvement. There is some sharing of good practice, with modest access to subject-specific professional development. Accommodation, resources and working practices are fit for purpose.</p>
<b>4</b>	<p><b>Inadequate</b></p> <p>Leadership and management of the subject are likely to be inadequate if any of the following apply.</p> <ul style="list-style-type: none"> <li>■ Capacity for further improvement is limited because current leaders and managers have been ineffective in securing essential improvements.</li> <li>■ Leaders and managers are not taking effective steps to secure satisfactory and better teaching for all groups of pupils, including disabled pupils and those who have special educational needs.</li> <li>■ Despite remedying a few small areas of weakness, perhaps recently, improvements are fragile, too slow or depend on external support.</li> </ul>	<p>Leadership is not well-informed about current initiatives in D&amp;T. Key statutory requirements for D&amp;T are not met. Self-evaluation is weak and not informed by good practice in D&amp;T. Opportunities for professional development in D&amp;T are limited and, as a result, some staff lack the confidence and expertise to deliver it effectively. D&amp;T has a low profile in the life of the school. Leadership is not effective in securing sufficient resources to support pupils' learning or pupils' safety.</p>

<sup>6</sup> Grade descriptors are not to be used as a checklist but should be applied adopting a 'best fit' approach.

## Grade descriptors:<sup>7</sup> the overall effectiveness of D&T

<p><b>Outstanding</b> (1)</p>	<p>Practice in the subject consistently reflects the highest aspirations for pupils and expectations of staff. Best practice is spread effectively in a drive for continuous improvement. Teaching in the subject is likely to be outstanding and together with a rich curriculum, which is highly relevant to pupils' needs, it contributes to outstanding learning and achievement or, in exceptional circumstances, achievement that is good and rapidly improving. Thoughtful and wide-ranging promotion of the pupils' spiritual, moral, social and cultural development in the subject enables them to thrive. Consequently, pupils and groups of pupils have excellent experiences in the subject, ensuring they are very well equipped for the next stage of their education, training or employment.</p>
<p><b>Good</b> (2)</p>	<p>Effective action is taken in the subject to enable most pupils to reach their potential. Pupils benefit from teaching that is at least good. This promotes very positive attitudes to learning and ensures that achievement in the subject is at least good. Leadership and management of the subject play a significant role in this and are good overall. Deliberate and effective action is taken to promote the pupils' spiritual, moral, social and cultural development. A positive climate for learning exists and pupils and groups of pupils have highly positive experiences in the subject so that they are well prepared for the next stage in their education, training or employment.</p>
<p><b>Satisfactory</b> (3)</p>	<p>Achievement, the quality of teaching and learning and leadership and management of the subject are all likely to be at least satisfactory with some significant good practice. Reasonable steps are taken to promote pupils' spiritual, moral, social and cultural development. Pupils and groups of pupils have a generally positive experience in the subject and are not disadvantaged as they move to the next stage of their education, training or employment.</p>
<p><b>Inadequate</b> (4)</p>	<p>Overall effectiveness in the subject is likely to be inadequate if any of the following apply.</p> <ul style="list-style-type: none"> <li>■ Achievement is inadequate.</li> <li>■ The quality of teaching is inadequate.</li> <li>■ The curriculum is inadequate.</li> <li>■ Leadership and management are inadequate.</li> <li>■ There are important weaknesses in the promotion of pupils' spiritual, moral, social and cultural development resulting in a poor climate for learning in the subject where pupils or groups of pupils are unable to thrive.</li> </ul>

<sup>7</sup> Grade descriptors are not to be used as a checklist but should be applied adopting a 'best fit' approach.