



# Assessing Progress in Design and Technology

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#### Introduction

- To me
- To the current situation with QCDA
- To this presentation/workshop
- Any questions?





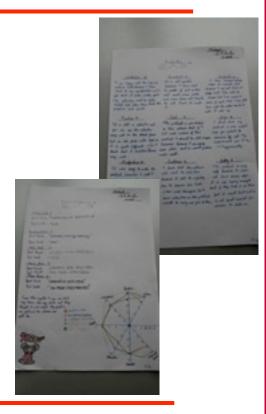




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#### The UK situation with assessment

- Confusion nationally
- AfL focus on learning
- Issues with levelling sub-levels, student friendly levels, secure levels
- Accountability teacher assessment, tracking, reporting
- Progression of learning carousel, focus area, evidence







#### features of effective assessment practices

- simple and apparent for everyone
- teacher professionalism secure judgements
- consistency reliable and valid?
- effective on all necessary levels
- role of assessment clear 'fitness for purpose'

## QCDA key messages about assessment





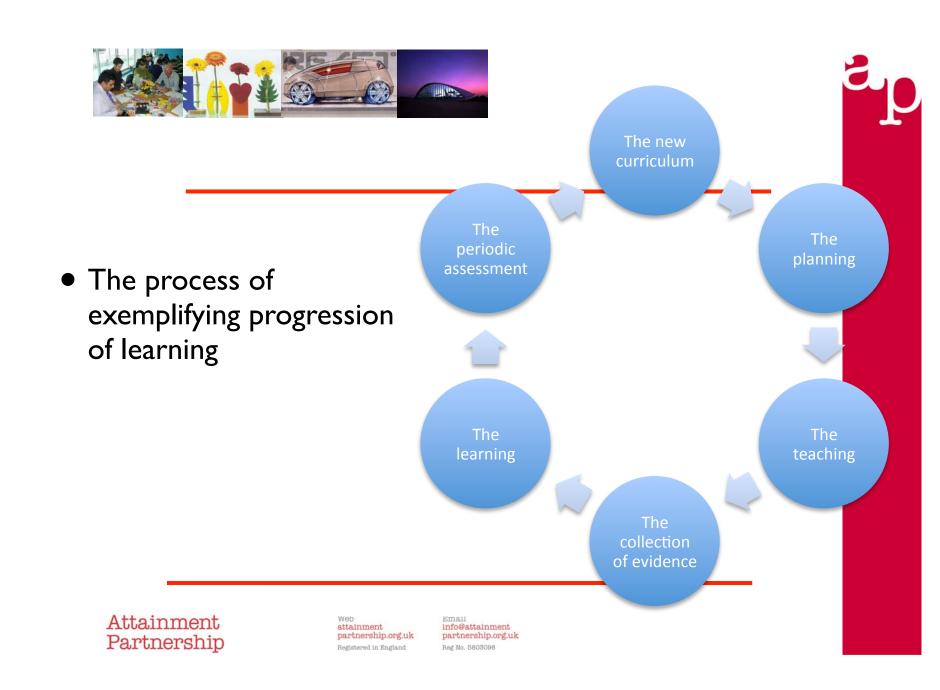
- The following underpin all our work on assessment:
- The learner is at the heart of assessment.
- Assessment needs to provide a view of the whole learner.
- Assessment is integral to teaching and learning.
- Assessment includes reliable judgements about how learners are progressing related, where appropriate, to national standards and expectations.





## Types of assessment

• Day to day	Teacher/learner - classroom		
<ul><li>Periodic</li></ul>	<ul> <li>Teacher/department - moderation, standardisation</li> </ul>		
• Transitional	<ul> <li>Teacher/department/school - summary in relation to national standards</li> </ul>		







The planning

teaching

of evidence

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- Encouraged creativity 'the spirit of the new curriculum'
- Encouraged risk-taking something new
- Embrace PLTS opportunities
- New opportunities and curriculum opportunities
- Cross-curriculum planning discussed





The new curriculum

The planning

The teaching

The collection of evidence

The learning

The periodic assessment

- What is the overarching intention of this unit and where would you like pupils to be by the end of it?
- How does the intention of the unit address the importance statement for your subject?
- Which key concept will underpin the study of this unit in order to deepen and broaden pupils' knowledge, skills and understanding?
- Which essential key process do you hope pupils will address as a result of studying this unit.



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The new planning

teaching

of evidence

learning

assessment

- "The intention of this project is to broaden pupils creative and making skills. Pupils are designing and making a collapsible fabric structure based on an existing Ikea product. They will be using creative design strategies to experiment with and test surface decoration techniques on fabrics they have purchased in order to innovatively respond to the theme of stripes. The product is aimed at teenagers as there is no obvious provision for this in Ikea and the existing product could be improved to appeal more to the target audience. By the end of it the pupils should have developed design strategies to help them make suitable choices that reflect and answer the design brief. they will also have experimented with a variety of materials and equipment that will have extended their skills and allowed them confidence when problem solving the construction of a 3D structure. Pier evaluation will help them to become more reflective thinkers and understand the necessity to answer the design brief in full in order to gain commercial success"
- "The unit focuses on introducing 'the real life of design' to the students. They look at a range of iconic products designed and produced throughout history and analyse their effects and impacts, looking specifically at technological advances and the impact on society"





# The planning

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of evidence

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assessmen

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The teaching

evidence

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Key activities:
What will the
pupils do and
what will you
teach? Please list
between two and

between two and four substantial activities in sufficient detail for the reader to tell what the pupils will be doing.

What are you trying to achieve and how does this relate to the key concept/s and process/es noted above?

What evidence of learning do you hope to see? (Remember this can be ongoing evidence and quite small amounts as well as more substantial evidence towards the end of the unit.)

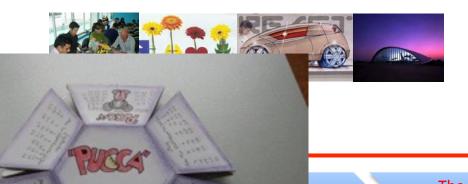
What form/s
do you
anticipate the
evidence will
take?





### Example of a 'teaching' plan

Key activities: What will the pupils do and what will you teach?	What are you trying to achieve and how does this relate to the key concept/s and process/es noted above?	What evidence of learning do you hope to see?	What form/s do you anticipate the evidence will take?
Students are to use a set of image cards to analyse what the impact different products have on the planet	Students are to use a set of image cards to analyse what the impact different products (kinder egg, CD, etc) have on the planet.	Students will evaluate what impact products have on the environment by discussing and completing 'where's the impact' worksheet. Analyse the environmental and social effects of a range of products.	Students analysing products and the effect on the environment . Research stage.



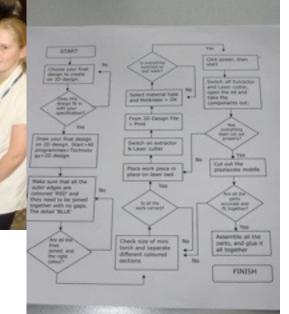
The collection of evidence

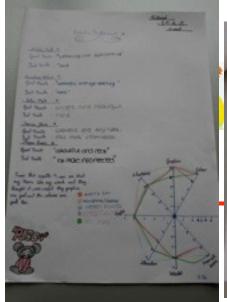


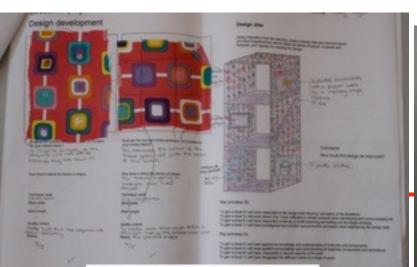


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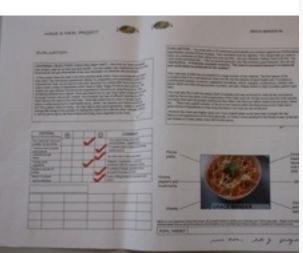
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DESIGN IDEAS





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The learning

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Oral outcomes	Written outcomes	Visual outcomes
Presentation Lecture Debate Panel discussion Interview Tour guide /audio presentation Radio documentary Pod cast Moviemaker commentary Exhibition commentary	Essay Academic article Report Letter or email Review Short biography Fictional story Web debate Text book spread Poem / song Blog Web stie text Trailer for movie	Ppt – picture selection Documentary film Web pages Exhibition gallery Guide Souvenir Model Stage set Board game Interactive display Multi media story board Graphic novel





evidence

The learning

#### Comments on individual evidence: piece 1

- 2. What does this piece of work show about what the pupil has learnt? Please give enough information to allow your comments to make sense to someone who knows the subject, has seen the plan and the evidence but wasn't at the lessons
- 3. How does the work show understanding of key concept/s and key processes as you envisaged them in your plan and as noted above.
- 4. Are there any other things that that this piece of work shows you about what the pupil has learnt, understands or can do?

Comments on individual evidence: piece 2



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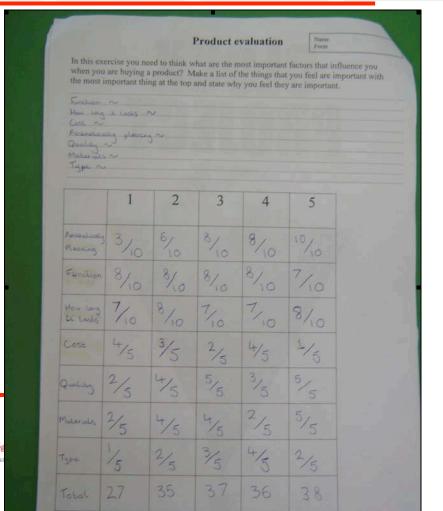
lection

The learning

What does this piece of work show about what the pupil has learnt?

After a group discussion the pupils were asked to produce a set of 7 criteria of their own by which they could evaluate existing products (clocks). The 7 criteria that were to be ranked in order of priority starting with the most important first (e.g. function). The first 3 were to carry a ranking out of 10 and the rest 5. They then scored the 5 existing product. Pupils understood that before brining the design process it was important to see what had worked well/not so well in similar product.

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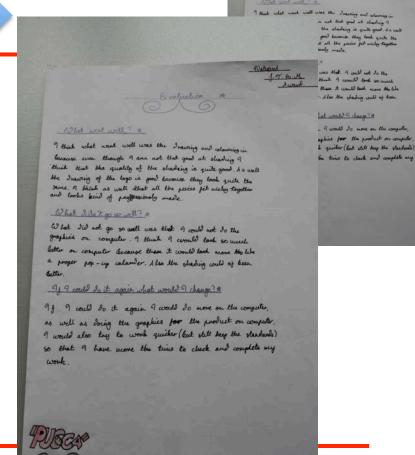




The learning

What does this piece of work show about what the pupil has learnt?

A detailed evaluation is presented covering all the required areas – performance, production, users etc. The student understands the importance of quality feedback to not only improve the effectiveness of the product but her performance in terms of learning. She has independently selected these strategies and they have provided her with a good range of quality feedback to improve her product next time.



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The periodic assessment

- Provides an overview based on a collection of work
- Makes use of evidence from all stages of pupils' learning
- Needs to be applied to 'evidence' not simply to 'work'.

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#### CAFEBUE

Find an existing piece of ece furniture on the internet and analyse it using the CAFÉ@UE grid below.

CAFEQUE	Comments
Cost Will the estimated cost of the product meet the needs of the person who will buy if it	I don't know the cost but I reacon it might be around \$20 because it would be hard to make and it's cool.
Aesthetics Does the product look good? Will it fill in with where its going to be used?	ves, because people southo like cool Hings & world shaped Hings would be like it.
Function Is it likely that the product will do what it needs to?	Yes at but only if the owner is careful and looks after the cheir and keepit in a good contin
Ergonomics Will the product meet the identified ergonomic needs of the user?	chair and you have adrink but spilled it will wreck the chair. and go soggy
Quality Will you be able to make the product to a high standard? Will it be made to last the length of time needed?	layers and they are compact then hopefully it will last
User Will the product be suitable for the person who will use #?	yes a because the Person who buys it would of brought it because and looks the thought it was comforted and looks the like their expect things
Environment Will the product be environmentally therebyl Will it be recyclable when tinished with? Will it be made from materials which will harm the environment?	because you can recycle it afterwards. It with some made of cord board which isn't that but because it can be recycle
overall Comments: the comfy, but be more cu	Chair is cool, looks I think the bend could



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The periodic assessment

- The process of making a secure judgement
- Atomising the level descriptors?
- Fairly simple and effective process

Sentence by sentence mapped against key processes	Level 4	Level 5	Level 6	Level 7	Level 8
g) Generate, develop, model and communicate ideas in a range of ways, using appropriate strategies	Pupils generate ideas by collecting and using information	Pupils develop ideas by drawing on and using various sources of information	Pupils draw on and use a wide range of sources of information, and show that they understand the form and function of familiar products as they develop and model ideas	appropriate sources of information when developing and modelling	Pupils use a range of strategies to fully develop and model appropriate ideas, responding to information they have densified
b) Respond creatively to briefs, developing their ben proposals and producing specifications for products	They take users' views about aesthetic and technical issues into account as they respond to briefs	They clarify their ideas through discussion, drawing and modelling, showing understanding of aesthetics and economic dimensions	They respond creatively to briefs, exploring and testing their design thinking.	They investigate form, function and production processes as they respond creatively to briefs	They identify conflicting demands on a product and respond creatively to briefs, suggesting ways forward and explaining how their ideas address these demands.
<ul> <li>c) Apply their knowledge and understanding of a range of materials, mg edients and sectionologies to design and make their products.</li> </ul>	They communicate alternative ideas using words, labelled sketches and models, showing that they are aware of constraints	They respond to briefs showing understanding of how culture and society are reflected in familiar products when developing and communicating their own ideas	They develop detailed criteria for their products and use these to explore proposals.	They apply their knowledge and understanding, recognising the different needs of a range of users, and search for trends and patterns in existing solutions and they develop fully realistic products	they make decisions on materials, ingredients and techniques based on their understanding of physical properties and working
d) Use their understanding of others designing to inform their user:	They apply their knowledge and understanding of materials, ingredients and components, and work with them with some accuracy, paying attention to quality of finish and to function	They show that they are aware of constraints as they apply knowledge and understanding of materials, ingredients and techniques.	They apply their knowledge and understanding by responding to several aspects of the problem	They use their understanding of others designing to inform their own as they communicate creative ideas	They use their understanding of others designing by reinterpreting and applying learning in new contexts.
	They use some ideas from others designing to inform their own work.	They use understanding of others designing as they develop their work.	They recognise the significance of others designing and modify their approaches accordingly	They that predict the time needed to carry out the main stages of making products.	They so that they can carry out processes accurately and consistently, and

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### KP mapped to the level descriptors

Sentence by sentence mapped against key	Level 4	Level 5	Level 6	Level 7	Level 8
a) Generate, develop, model and communicat e ideas in a range of ways, using appropriate strategies	Pupils generate ideas by collecting and using information	Pupils develop ideas by drawing on and using various sources of information	Pupils draw on and use a wide range of sources of information, and show that they understand the form and function of familiar products as they develop and model ideas	Pupils use a wide range of appropriate sources of information when developing and modelling ideas	Pupils use a range of strategies to fully develop and model appropriate ideas, responding to information they have identified





#### Conclusion - difficulties with the planning process

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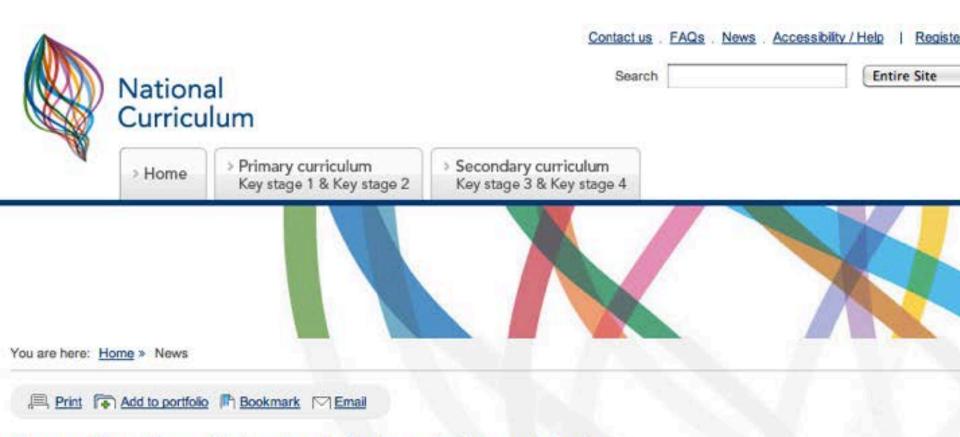
- D and M activities repetition
- Traditional forms of evidence
- Evidence did not show learning
- Teaching hindering learning
- Needed a complete 'mind shift' in approach to teaching
- Individual teachers planning





#### Key findings / recommendations

- The planning is the crucial component
- 'Levelness' one piece of work can not demonstrate a level
- Level a 'portfolio' of evidence
- Sub levels add another layer of complexity
- Periodically assess when necessary
- No need to assess every learner every time
- Use the level descriptors for assessing not planning
- Evidence rich tasks needs a real push
- Needs a team approach
- Tracking and reporting needs to support the assessment process



#### Exemplification of standards in foundation subjects

The exemplification of standards in foundation subjects materials provide teachers, (as well as parents and pupils) with annotated collections of evidence, gathered from individual pupils, which are judged to represent different levels of attainment in relation to national standards and in the context of the current secondary curriculum, introduced in 2008. They can be used to support the statutory teacher assessment of pupils at the end of key stage 3 by providing nationally agreed benchmarks and points of reference.

Materials for the core subjects and ICT can be found on the National Strategies website.

#### More news items











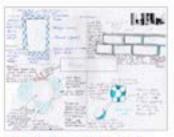




#### Pupil's work



1. Mood board



2. 4x4 design activity



3. 4x4 design activity



 Group discussing designs

#### 1. Mood board [png 6mb]







#### Assessment commentary

Pupil C has produced a product within her comfort zone. She has understood the need to modify manufacturing techniques throughout the design and make process. She was receptive to the team's comments, which she reflected on before making design decisions. Her final design reflects an understanding of aesthetic and economic considerations.

#### Designing:

Pupil C has clearly considered aesthetic and economic factors when designing and making. Her mirror design reflects the theme chosen by her team and ties in aesthetically with the products produced by the other team members. Her annotations on the 4x4 design activity sheet and contributions to the team discussion show an awareness of cost and efficiency when selecting manufacturing techniques.

The annotations on her initial idea show a clear understanding of constraints imposed by materials and their properties. She discussed tools and production processes relating to materials.

#### Making and reviewing:

Pupil C listened to her team's views and, as a result, modified her design so it would be easier to produce. She talked clearly about this, relating her decisions to the needs of the target audience and economic considerations.





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#### Some 'assessment' questions...

- Are you 'designing' your assessment opportunities in detail, ensuring creative, valid, reliable activities?
- Do your learning outcomes 'capture' the learning you intended them to do? How do you know?
- Is the learning clearly planned, with progression and practice opportunities across the department?
- Can you exemplify a students current learning profile or level and explain why?





# Assessing Progress in Design and Technology

# **ANY QUESTIONS?**

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