

Level 2/3

(WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

They must design ideas by collecting and using pictures from a limited range of resources.

They use equipment for skilled tasks, label and explain their designs using colour when appropriate.

They design for markets.

Investigate the work of designers and write about their products and skills.

Evaluate their designs comparing their work to that of others. They explain how their ideas/product could be changed in order to improve it.

Level 4

(WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

Pupils generate ideas by collecting and using information.

They take users' views about aesthetic and technical issues into account as they respond to briefs.

They communicate alternative ideas using words, labelled sketches and models, showing that they are aware of constraints.

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 use some ideas from others' designing to inform their own work.

They produce step-by-step plans and then select and work with a range of tools and equipment.

They identify what is working well and what could be improved to overcome technical problems.

They reflect on their designs as they develop, recognising the significance of knowledge and previous experience.

Level 5

(WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

Pupils develop ideas by drawing on and using various sources of information.

They clarify their ideas through discussion, drawing and modelling, showing understanding of aesthetic and economic dimensions.

They respond to briefs showing understanding of how culture and society are reflected in familiar products when developing and communicating their own ideas.

They show that they are aware of constraints as they apply knowledge and understanding of materials, ingredients and techniques.

They use understanding of others' designing as they develop their work.

They work from their own detailed plans, modifying them where appropriate.

They work with a range of tools, materials, ingredients, equipment, components and processes with some precision.

They check their work as it develops, solve technical problems and show some evidence of creativity as they modify their approach in the light of progress.

They test and evaluate their products, showing that they understand the situations in which the products will function.

Level 6

(WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

Pupils draw on and use a range of sources of information, and show that they understand the form and function of familiar products as they develop and model ideas.

They respond creatively to briefs, exploring and testing their design thinking.

They develop detailed criteria for their products and use these to explore proposals.

They apply their knowledge and understanding by responding to several aspects of the problem.

They recognise the significance of others' designing and modify their approaches accordingly.

They produce plans that outline alternative methods of making progress.

They work with a range of tools, materials, ingredients, equipment, components and processes, showing that they understand their characteristics.

They check their work as it develops and solve technical problems by modifying their approach in the light of progress.

They evaluate how effectively they have used information sources, using the results of their research to inform their judgements when developing products.

They evaluate their products as they are being used, and identify ways of improving them.

Level 7

(WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

Pupils use a wide range of appropriate sources of information when developing and modelling ideas.

They investigate form, function and production processes as they respond creatively to briefs.

They apply their knowledge and understanding, recognising the different needs of a range of users, and search for trends and patterns in existing solutions as they develop fully realistic products.

They use their understanding of others' designing to inform their own as they communicate creative ideas.

They produce plans that predict the time needed to carry out the main stages of making products.

They work with a range of tools, materials, ingredients, equipment, components and processes, taking full account of their characteristics.

They adapt their methods of manufacture to changing circumstances as they solve technical problems, providing a sound explanation for any change from the design proposal.

They select appropriate techniques to evaluate how their products would perform when used and modify their products in the light of this evaluation to improve their performance.

Level 8

(WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

Pupils use a range of strategies to fully develop and model appropriate ideas, responding to information they have identified.

They identify conflicting demands on a product and respond creatively to briefs, suggesting ways forward and explaining how their ideas address these demands.

When applying knowledge they make decisions on materials, ingredients and techniques based on their understanding of physical properties and working characteristics.

They use their understanding of others' designing by reinterpreting and applying learning in new contexts. They organise their work so that they can carry out processes accurately and consistently, and use tools, equipment, materials, ingredients and components with precision.

They use accurate testing to inform their judgements when solving technical problems.

They identify a broad range of criteria for evaluating their products, clearly relating their findings to environmental, ethical, and social and cultural dimensions.

Exceptional Performance

(WORLD ASSOCIATION OF TECHNOLOGY TEACHERS)

Pupils seek out information to help their design thinking.

They recognise how products contribute to lifestyle and choices of a variety of client groups as they develop and model ideas in an innovative way.

Responding creatively to briefs, they are discriminating in their selection and use of information sources to support their work.

They interpret and apply knowledge and understanding creatively in new design contexts and communicate ideas in new or unexpected ways.

They use understanding of others' designing in innovative ways. They work with tools, equipment, materials, ingredients and components to a high degree of precision.

They make products that are reliable and robust and that fully meet the quality requirements given in the design proposal.

They reflect critically and effectively throughout designing and making processes.