

# **NEW PARK HIGH SCHOOL**

## **Design & Technology POLICY DOCUMENT**

**ISSUED: SEPTEMBER '10**

## New Park High School

### Design & Technology Policy Document

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## **1.0 Statement of Intent**

At New Park High School our mission statement declares ‘ We strive to provide a caring, structured learning environment in which all pupils, many of whom have specific learning difficulties, such as dyslexia, can develop academically, socially, and emotionally, to their full potential, and in which pupils and staff feel safe, secure and valued’.

We believe that every young person should have the opportunity to develop an understanding of the beliefs and practices of a range of religions and to develop an awareness of the spiritual aspects of life.

Design & Technology makes a unique contribution to the school curriculum by

We aim to

- Contribute to the overall aims of the school.
- Foster awareness, understanding and expertise to develop creative thinking.
- Develop investigation, research, planning, designing, making & evaluating skills.
- Encourage pupils to work with a range of tools and materials.
- Allow pupils to develop knowledge which will help them solve practical and technological problems.
- To stimulate the development of communication skills which are central to design, making & evaluating.
- To promote the development of curiosity, enquiry, initiative, ingenuity and resourcefulness.
- To encourage technical awareness, foster attitudes of co-operation and social responsibility and develop abilities to enhance the quality of the environment.
- Encourage pupils to question the world around them.
- Give pupils the opportunity and confidence to tackle and solve problems.
- To encourage an open mind and investigative approach.
- To encourage pupils to work individually and as part of a team.
- To foster cross-curricular links where possible.
- To encourage the use of ICT as a means of communication, learning and as a design tool.

During the teaching of Design & Technology pupils will be given opportunity to acquire and apply knowledge and understanding of a range of topics and skills which will encourage pupils to be open minded and allow them to develop an investigative approach when tackling problems. Through problem solving and technical activities pupils should build up their skills and confidence to enable them to approach a man made world as active participants in future development whilst still showing care and sensitivity for the environment.

## **2.0 Rationale**

The Design & Technology scheme of work delivered to the pupils will explore the local, national and worldwide issues. The KS3 Scheme is a skills based scheme. The scheme of work is based on the Unit award scheme which allows for the inclusion of school designed units. In KS3 pupils work on units / topics of work. In KS4 pupils follow Asentis scheme (Construction) of work – Level 1 Award & Certificate in Introduction to the Construction environment.

## **3.0 School Development Planning**

- The school development planning process makes a major contribution to the development of Design & Technology is a subject within the curriculum. All proposed developments include a brief description of the area for development with targets, clear success criteria, monitoring and evaluation arrangements and resource/staffing implications and costs. The budget allocation to Design & Technology is based on the proposals put forward in the subject development plan produced by the co-ordinator.

## **4.0 Financial Management**

The co-ordinator has an important contribution to make to the efficient management of financial resources.

The subject co-ordinator holds a budget and is expected to manage financial resources strategically. All spending should relate to the targets set out in the subject development plan. The co-ordinator is responsible for monitoring his/her allocated budget and should be able to present up to date accounts on request.

## **5 The Role of the Design & Technology Co-ordinator**

The Design & Technology Co-ordinator has an important curriculum management role in this school. This role is to ensure that all pupils receive their full entitlement to the Design & Technology curriculum entitlement. Key tasks include:

- Administration of the subject, including record keeping and report writing
- Professional development
- Curriculum development
- Resources management
- Development planning
- Production of relevant documentation
- Management of Design & Technology lessons
- Monitoring and evaluation of provision

## **6 Resources**

The provision and management of resources can affect the quality of teaching and learning of Design & Technology and consequently the standards of achievement. The co-ordinator will, therefore, maintain effective records of resources to assist planning and effective teaching. The ordering of resources is linked to the subject development plan. All equipment is purchased and maintained from budgets allocated from the main school budget.

## **7 Special Educational Needs**

In the teaching of Design & Technology it is recognised that all pupils are different in needs, abilities and learning styles and may develop at much slower or faster rates than others. It is our intention to:

1. recognise individual needs both in terms of academic ability and emotional and other related difficulties
2. provide the opportunity for all students to fulfil their potential
3. take account of the long term development of the each pupil throughout the key stages, recognizing times of individual crisis where necessary
4. allow movement of individual students between groups/ classes as and when necessary

## **8 Grouping Strategies**

Generally children will work on Design & Technology activities either directly with the subject specialist teacher or under his/her guidance. Depending on the nature of the activity they will work:

- as individuals
- paired with another pupil
- with TA support
- with their class or key stage

### **9.0 Planning**

The aim of the department is to give equal educational learning experiences to all. We also endeavour to give scope within the national curriculum to allow each pupil to gain personal success while being stretched at his/her own level.

The scheme of work for Design & Technology gives clear guidance about how the subject is taught at New Park High School to each year group to ensure breadth, balance, relevance, differentiation, continuity and progression. As part of the long term planning, the scheme also takes account of other broader dimensions of the curriculum. These include spiritual, moral and cultural development, literacy, mathematics, citizenship and PSHE. Each unit identifies learning objectives and suggests activities to meet these and describes outcomes of pupils learning. The Medium Term plans take into account the individual needs of each child alongside the whole school scheme of work. Each half termly teaching programme is based upon advice from the SENCO and targets set in IEPs. Short term planning for the delivery of the scheme is presented in the form of a Lesson Diary, giving specific dates, format of the lesson and outcomes.

### **10.0 Inclusion**

In order to provide effective learning opportunities to all pupils, three principals are followed:

- Setting suitable learning challenges
- Responding to the diverse needs of pupils

Overcoming potential barriers to learning and assessment for individual and groups of pupils, such as pupils with dyslexia, but also giving specific consideration to the teaching of female pupils within a potentially male orientated environment.

### **11.0 Assessment, Recording & Reporting**

The purpose of assessment is set out clearly in the whole school assessment policy. Assessment is a vital and integral part of the teaching and learning process. The monitoring of pupil progress enables both teachers and pupils to evaluate their work and informs future teaching and learning.

### **12.0 Assessing progress**

#### **Key Stage 3 & 4**

Opportunities for assessing pupils' progress are built into each unit and links with the marking policy. Pupil's evidence of work is collated into folders/books and students are given termly targets. They are based on monitoring each pupil's success in achieving the learning outcomes specified in the non statutory national guidance, scheme of work & level descriptors. This monitoring provides a measure of progress and a check on how ready pupils are to move on to the next stage or whether they need additional support or challenge, thus the work pupils do, provides evidence of what they have been taught and their progress. In some circumstances a summative piece of work or test may be used to assess how individual pupils are achieving in relation to the end of unit expectations.

Feedback is provided to pupils through informal oral comments and carefully marked work using assessment for learning (AFL).

### **13 Classwork**

This includes some or all of the following – use of structured questions and project / topic work, photographic evidence.

### **14 Marking**

Work is marked regularly with the emphasis on effort and content. The emphasis is on providing positive feedback. Wherever possible work is marked within the lesson to provide immediate feedback. Bonus points are used to further reward effort and achievement.

## **15 Homework**

Homework is currently not compulsory but often offered and encouraged through rewards to enhance and revise skills taught.

## **16 Literacy Strategy across the Curriculum**

Pupils are likely to be more successful if there are consistent approaches to speaking, listening, reading and writing across the curriculum that build on the work of primary teachers who have been implementing the *National Literacy Strategy: Framework for teaching*.

The ‘use of language across the curriculum’ statement in the national curriculum requires that three areas of language should be included in all subject teaching:

- General accuracy in using language – spoken, written and read. In Design & Technology this includes the designing of product and clear labelling of ideas and resources to explain how the product is to be made and what materials he/she will use to make it. In this subject pupils are constantly using oral skills to explain ideas, develop ideas and evaluate their finished work.
- Technical terms and concepts that are specific to the subject. In Design & Technology this includes design, make, evaluation, creative thinking, communication & investigation.
- Patterns of language, especially forms of sentences and whole texts, associated with the subject. In Design & Technology the scheme of work provides opportunities for pupils to use a range of written forms ranging from simple labels on design, to simple and complex use of sentences in planning & evaluating to using ICT / research skills to aid language, sentence structure and reading.

## **17 Spiritual, Moral, Social and Cultural Development**

Design & Technology provides opportunities for:

- Spiritual development through helping pupils to consider questions about the nature of values in human society;

- Moral development, through helping pupils to consider and respond to areas of morality on a world wide scale. This enables them to make reasoned and informed judgements to issues;
- Social development, through helping pupils to develop skills such as working as a team or group on a project.
- Cultural development, through fostering pupils' awareness and understanding of a range of values in their own society, and in the wider world. Pupils explore issues about different cultures developing their understanding of the world within which they live. Pupils use ICT to explore / develop ideas about other cultures designs/designers.

Specific units contribute to these areas

## **18 Cross Curricular themes**

### Literacy

- Raise standards for all.
- Develop student's confidence in the user of language.
- Enable students to make choices about the kinds of texts they enjoy.
- Develop student's key skills in all areas of language.
- Link language with thinking processes
- Develop student's knowledge of and familiarity with a wide range of vocabulary used in DT.
- Teach students to read fluently and with understanding
- Develop student's ability to use information texts and to locate, extract and use relevant information.
- Enable students to generalise beyond DT to all areas of the curriculum in order to apply and develop further their language skills.
- Develop writing skills for a range of purposes and audiences, using spelling, punctuation and syntax appropriately and with confidence.
- Promote a wide use of ICT for the further development of language in DT
- Enable students to communicate clearly and be able to talk and listen in a variety of groupings and in both formal and informal contexts.
- Develop enterprise lessons. Pupils to make product that can be sold.

### Numeracy

- Pupils to use mathematical vocabulary and use equipment suitable for measuring.

### Art

- To explore others cultures through art so that pupils draw on inspirations of shape, pattern and scale.

### History

- To look at how cultures designed in the past e.g. structures (bridge design)

### ICT

- To use research skills on the internet to aid design development.

### Music

- In enterprise lessons pupils make a range of products to sell e.g. musical instruments.

### Food Technology

- Explore ideas related to pattern, texture and colour.

## **19 ICT**

Opportunities to use ICT to enhance pupils' learning are indicated in individual unit's scheme of work. Pupils could use ICT to:

- Enhance their skills of communication by corresponding by e-mail with other schools
- Provide a range of information sources to enhance their knowledge and understanding of design for research ideas.
- Communicate, structure and define their work;
- Access images to develop their designing and making ideas.
- Contribute to their awareness of the moral impact of ICT on the changing world e.g. the environment and sustainability.

## **20 Functional Skills**

The scheme of work provides a foundation for the common areas of learning required for functional skills. These three areas of focus are: ICT, Maths and English.

## **21 Personal, social and health education (PSHE) and citizenship/SEAL**

Design & Technology promotes the values and attitudes needed for citizenship in a democratic society by helping pupils to understand and respect people and the environment on a worldwide scale. Design and Technology contributes to citizenship by providing opportunities to engage with, discuss, critically question, appreciate, make reasonable judgements and understand design products, techniques and responses from different times, places and cultures.

Pupils have the opportunity to explore their own needs and opinions and reflect on those of others. Pupils personalise the meaning of ideas expressed and learn to express themselves through both independent and group work. Design and Technology offers pupils opportunities to resolve conflicting demands, justify the decisions they make, and begin to take responsibility for their own actions, reflect upon and value their own work and that of others. Creativity and self-discipline are encouraged by the provision of planned opportunities which require pupils to think and intervene creatively to improve the quality of life.

## **22 Community Links**

These can be promoted by

- Inviting outside bodies into school to share their expertise and experience
- Small group educational visits to support the programme of study.
- Involving pupils in enterprise activities which can be sold in the community or at community events.

## **23 Equal Opportunities (see also 'Inclusion')**

An entitlement to learning must be an entitlement for all pupils. We must ensure that all pupils have equal access to the Design & Technology curriculum and have the chance to succeed, whatever their individual needs and the potential barriers to their learning may be.

Equality of opportunity is one of a broad set of common values and purposes which underpin our school curriculum and work. These also include a commitment to valuing ourselves and our relationships, the diversity in our society and the environment in which we live.

Design & Technology is a subject which encourages pupils to understand and develop their values and practical skills. The equal opportunities policy relates to religious, ethnic, (dis)ability and gender themes. The Design & Technology curriculum plays a major role in promoting Equal Opportunities by aiming to:

- Develop equality of opportunity to ensure that each pupil has the opportunity to realise his or her potential irrespective of gender, race, religion or disability.
- To equip pupils with skills that enable them to participate fully as members of a pluralist society and develop awareness of the rights and responsibilities of groups and individuals.
- Provide learning experiences that are free from religious, ethnic and gender bias.
- Ensure that each pupil has opportunity to express their values and beliefs where these do not infringe this right for others.
- Providing positive images of minority groups through the use of appropriate resources, display materials, texts, etc.

## **24 Diversity**

At New Park we aim to increase our students' cultural awareness, knowledge, and skills and aim to encourage tolerance for people of different backgrounds and abilities, which is based on the assumption that this will ultimately increase the inclusion of different identity groups, and promoting better teamwork. In Design and Technology we promote diversity by overcoming any potential barriers to learning in design and technology the following interventions are planned and prepared:

- alternative tasks to overcome any difficulties arising from specific religious beliefs they may hold in relation to the ideas or experiences they are expected to represent
- Alternative or adapted activities to overcome difficulties with manipulating tools, equipment or materials.
- specific support to enable them to engage in certain practical activities through negotiation with learning support
- opportunities to communicate through means other than writing or drawing and help to record or translate their design ideas into a drawing
- opportunities to work in ways that avoid contact with materials to which they may be allergic
- time and opportunity to use non-visual means to gain understanding about, and to evaluate, different products and to use this information to generate ideas
- additional time to complete the range of work indicated in breadth of study

## 25 **Every Child Matters**

**Enjoy and achieve:** getting the most out of life and developing the skills for adulthood

- In DT pupils are offered GCSE'S in resistant materials, product design and entry level certificate.
- Pupils are given the opportunity to examine the wider world and use knowledge gained to support or develop their work.
- Within this subject pupils are given projects which could be used in the outside world.
- Pupils are encouraged to take part in lessons which usually starts with a written focus before moving on to the main practical element of the subject.
- Lessons are given a structure so pupils are aware of the lesson focus and what they need to achieve by the end of the lesson. In DT we try to provide a stimulating environment where pupils work individually, in pairs or groups on projects of interest or projects that lead to a qualification or certificate.
- Design & technology contributes to pupils enjoyment through the opportunities it gives them to actively develop products in response to other people's needs or wants. Pupils are given the confidence to challenge assumptions as they research ideas and engage with the world beyond school in order to produce solutions that are relevant to real needs.
- Design & technology develops a sense of achievement in pupils when their product takes shape and when they are able to create practical solutions, products and systems that improve the quality of life for one person or for many.

**Achieve economic well being:** overcoming socio-economic disadvantages to achieve full potential in life

Consider for your subject if you promote/cover any of the below:

- Pupils have opportunities to complete an entry level certificate well as GCSEs.
- In DT pupils can take part in enterprise lessons making and selling things to family, staff, at school open days etc.?
- Within DT pupils are required to use a variety of skills in subjects e.g. literacy/numeracy skills. Pupils needs to orally explain what they need or want as well as how to further develop a project. Pupils also are required to label drawing or add simple and complex explanations to drawings in order to fully explain their ideas. Pupils are also encouraged to research projects on the internet which may require an amount of reading.
- Design & technology is about applying knowledge of materials and processes to the design of products, and generating practical solutions that are relevant and fit for purpose. It's also about solving technical problems, responding creatively to briefs, and developing proposals in a range of material areas. The skills that pupils develop in these processes are highly valued.
- When pupils analyse products they learn about economic and industrial issues. This lays the foundation for becoming economically aware.

**Make a positive contribution:** to the community and to society and not engaging in anti-social or offending behaviour

Consider for your subject if you promote/cover any of the below:

- Within DT students are all encouraged to show positive behaviour so exclusions and bullying is reduced.
- As a school we challenge and report any racial or religious prejudice.
- Design and technology provides May opportunities for pupils to present their ideas about their own & other people's products, and to engage in collaborative problem-solving. E.g. pupils work as team members or leaders to analyse commercial products and solutions, and to make value judgements about them. Some of the products that pupils design and make will contribute positively to their home or school environment.

**Be safe:** being protected from harm and neglect; growing up able to look after themselves

- With in DT all staff who use the machines are qualified to do so, this qualification lasts for 5 years.
- All risk assessments are completed within this subject.
- Within this subject as in the school teachers and teaching assistants take effective action to reduce anti-social behaviour such as bullying and racism and report incidents to the senior management team. Within DT pupils are in formed of the health and safety procedures. All pupils know the location of all the emergency stops. Pupils who are unsafe in the workshop receive ban due to health and safety as they are seen as a risk to themselves, other pupils and staff. A ban can be anything from 1 lesson to 4 weeks depending on the incident. When planning, organising and carrying out practical activities, pupils are guided and advised in order to remain safe.
- They learn to recognise risk, and to take responsibility for themselves and others as they use tools and equipment to develop products. As they choose which hand or machine tools and other equipment to use, pupils are advised to think clearly about what they should do to use these items safely.

- The head of design & technology takes regular safety inspections making sure the room is tidy and in working order for the start of each lesson.
- The electric circuits are checked as well as emergency stop buttons weekly, if any problems occur or issues of a health and safety nature are found it is reported to the site manager and the office.

**Be Healthy:** enjoying good physical and mental health and living a healthy lifestyle

- Pupils are encouraged to obey the rules in DT and cannot smoke in the school building or take any other form of substance.
- Year 10 & 11 are designing & making a healthy living board game for their product design GCSE.
- The satisfaction that pupils gain from developing products in all material areas contributes towards their self- esteem and sense of well-being. When designing & making they learn that good design addresses ergonomic and health and safety issues in the home and the workplace.
- They learn to engage with health and safety issues that relate to practical activities e.g. dust extraction.

## **26.0 Parental Involvement**

At New Park High School we believe, that because of the nature of the students' difficulties and the geographical distances from home, it is important to actively encourage carers to keep in contact by phone and to feel involved in their child's education. Carers are contacted regularly by telephone and / or letter to provide positive feedback as well as to discuss other issues.

Carers are sent progress reports at the end of each school year plus a more detailed annual stat. review report. Every effort is made to make it possible for parents and carers to attend the yearly review meeting.

An open day before Christmas and a parents evening around Easter are offered to give carers a further opportunity to be involved in the life of the school. Additionally support is available to parents through specific courses offered after and/or during school hours, through individually arranged home visits and through agreed referrals to other agencies.

## **Health & Safety**

All substances should be clearly marked.

Risk assessments should be in place.

All pupils and staff working in the workshop should be told either verbally or in writing about the correct use of tools, materials & machines.

Care will be taken to deduce the amount of dust where possible.

The machinery will be checked regularly.

Plan lessons with personal and pupil welfare in mind.

Assess the risks of each individual activity.

Communicate any potential problems to senior members of staff.

Provided an environment where staff and pupils can work safely.

## **27.0 Monitoring/ evaluation and review**

Monitoring and evaluation is intended to help improve the quality of the education provided and the standards achieved within Design & Technology by all pupils. Monitoring is the process by which we gather evidence to help us make judgements about the quality of teaching, learning and pupil progress.

The co-ordinator working with the Head teacher is responsible for monitoring and evaluating Design & Technology throughout the school. This includes making an assessment of teacher planning records, teacher assessments, pupil records and classroom observation when applicable (at present the Design & Technology co-ordinator delivers/monitors the teaching across school).

The special needs of the children are taken into account in monitoring and evaluating Design & Technology.

Design & Technology within the school development plan is evaluating annually in consultation with colleagues and pupils where this is applicable.

This policy in all its aspects will be monitored and evaluated within two years of its ratification by the Senior Leadership Team. The Design & Technology policy documentation will be reviewed on a bi-annual basis by the Design & Technology co-ordinator

Reviewed September 2019

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C. McTeigue