HEALTH AND SAFETY TRAINING:

Your trainer:

Mr. Mark Elwell

RDTHSC

Designed By ME

Consultancy Ltd.

Mark Elwell

- See back page of booklet for more details:
- From school I attended Brunel University obtaining a BA (Hons) with QTS in 1995.
- Rapidly climbed the ladder in secondary education;
  - Head of Resistant materials in 1999.
  - Head of Design and Technology Department 2000.
  - Assistant Principal 2004.
  - Assistant Vice Principal 2007.
- Created **Designed By ME** at the start of 2011;
  - Consultancy work for CfBT for both Secondary and Primary Schools.
  - Registered Design and Technology Health and Safety Consultancy for DATA.
- **Designed By ME Consultancy Ltd.** Established in 2016.
  - Registered Design and Technology Health and Safety Consultancy for DATA.
  - Lead Health and Safety Consultant for D&TA (2018)
  - Lead health and safety machine trainer for Tilgear, Technology Supplies (2016)
  - Member of the BS4163 Committee (2018)
  - Member of the CLEAPSS Steering Committee (2018)
  - Working all over the UK and world

Welcome to your Health and Safety Training

- Over the 2 sessions you will gain:
  - Understanding, knowledge and accreditation in the legal side of the of the subject.
  - Working document to take with you in your career as a Design Technology teacher/leader/technician.
  - Ability to apply health and safety requirements to everyday situations in an educational setting.
  - Accreditation and ability to use and disseminate knowledge to learners of any age on a range of machines and processes.
  - An understanding of the health and safety requirements of a Design and Technology Department.

Introductions:



Time to say hello!

I would like you to tell me a little about you.

- First Name?
- What is your experience with machinery/workshops?
- What did you do prior to starting your teaching career?
- What aspect/material/subject within Design and Technology are you hoping to be a specialist in?

ACCIDENT or NEGLIGENCE

Southwark Crown Court heard that on 25 March 2014, a twelve-year-old schoolboy was in a design and technology class making animal shapes out of plywood. The class used hand saws, and some were using a belt sanding machine.

The court heard the schoolboy was using the machine for the first time, along with fellow pupils. They were shown how to use it by a fellow pupil, and none knew the purpose of the metal guard for the sanding belt which was in a raised position.

When the schoolboy put the shape to the belt, it flipped downwards into the gap pulling his left hand forward and trapping it between the shape and the belt. The top of the boys left hand middle finger had to be amputated down to knuckle and was absent from school for several weeks.

The Health and Safety Executive (HSE) prosecuting said the teacher had not received adequate training to recognise that the machine was in an unsafe condition or recognise the risk of allowing pupils to use the machinery unsupervised and without suitable training. The design and technology class had been without a technician for 8 weeks prior to the incident; on the day of the incident the teacher was supervising the class alone.

London Borough of Islington pleaded guilty to breaches of Section 3 of the Health and Safety at Work etc Act 1974 and was fined £200,000 and ordered to pay full costs of £19,865.

After the hearing HSE inspector Jane Wolfenden said: "It is important to create a safe teaching environment for pupils where they can learn to appreciate and manage the risks they will face in life.

"If the teacher had been appropriately trained on how to use the equipment for the lesson, they would have been able to show the pupils how to properly use the sanding machine. Instead, a young boy sustained an extremely painful injury that could have easily been avoided."

WHAT DO YOU THINK……..

The Design and Technology Association (D&TA)

The official Accreditation Details

HEALTH AND SAFETY TRAINING STANDARDS IN DESIGN AND TECHNOLOGY

Preparing to meet the CORE Level Training Standards

STATUS

The Health and Safety training 'standards' establish the professional view of what should constitute the minimum requirements:

- To obtain Qualified Teacher Status (QTS) in secondary Design and Technology
- For all colleagues involved in teaching Design and Technology in schools and colleges
- For all technicians, HLTA and other support staff

SUMMARY OF STANDARDS

For secondary schools, the health and safety training standards have been set out as follows:

- Core Level
- Specialist Levels
- Specialist Extension Levels

SUMMARY OF STANDARDS

Core Level

- All secondary teachers/technicians and support staff working in Design and Technology should work towards achieving accreditation at the Secondary Core Health and Safety level (SCHS)

Specialist Levels

- In addition, all those staff should work toward achieving accreditation within the Secondary Specialist Levels appropriate to their work. Currently these are in:
    - Food Technology (SFHS)
    - Textile Technology (STHS)
    - Resistant Materials (SMHS)
    - Systems and Control (SSHS)

SUMMARY OF STANDARDS

Specialist Extension Levels

- At present, only staff working in resistant materials are required to achieve accreditation at the Specialist Extension Levels.
  - Wood sawing machines (S1HS)
  - Centre lathe for metal cutting (S2HS)
  - Casting non-ferrous metals (S3HS)
  - Metal arc welding (S4HS)
  - Oxy-acetylene welding and cutting (S5HS)
  - Milling machines (S6HS)
  - Wood turning lathe (S7HS)
  - Planer/thicknesser machine (S8HS)
  - Portable power tools (S9HS)
  - Sharpening and grinding (S10HS)
  - Site Staff (S11HS)
  - Technicians (S12HS)

SUMMARY OF STANDARDS

Administration of the scheme

- The scheme is administered via the D&T Association who hold a national database is held of accredited staff
- Cost of Accreditation:
  - £30.00 for new Accreditation
  - £30.00 for Re-accreditation (after 5 years)
- Training must be done (or organised) by a Registered Design and Technology Health and Safety Consultant (RDTHSC), registered and licensed by the D&T Association

SUMMARY OF STANDARDS

1. H&S STANDARDS IN D&T – TDA/D&T association
2. Essential publications
3. Health and safety training
4. Risk assessments
5. Teaching strategies
6. COSHH assessments
7. Environment
8. Portable appliance testing
9. Lev testing
10. Machine maintenance

Preparing a personal portfolio of evidence for accreditation

Health and Safety Basics

How too…

- Code of Practise
  - BS4163 Health and Safety for Design and Technology in education and similar establishments
    - 1968 first edition (original edition)
    - 2014 edition (not valid – BIN IT!)
    - 2021 edition (active edition, latest update will be out Sept/Oct ’22)

BS4163

What organisations does the BS4163 apply to? (ii, 1)	What is a competent person? (3.1)	What training is needed for D&T? (4.6)
What is the acceptable noise level in a workshop? (4.9)	What are the recommended class sizes per trained employee in Design and Technology? (5.1)	Where should a batik wax pot be used?
Name a machine/process that students can only use under direct supervision?	What PPE should a user of a low temperature casting unit (Pewter casting) wear?	Do you need googles (PPE) when using cyanoacrylate adhesive?

PPE / RPE

- PPE
  - EN166 for glasses/goggles - F or B grading
    - (EN16321 C or E glasses/goggles rated)
  - ANSI Z87.1+ (USA)
  - GB 14866 (CHINESE)
- RPE
  - FFP3 / P3
  - WELs
- Aprons
  - PPE or Not?

PPE / RPE

What items of PPE do you have in your Design and Technology Dept?

Is an apron PPE?

What does FFP3 mean?

What is your employer's responsibility?

What is the employees (your) responsibility?

What is a WEL and how does it effect you?

EN166

- 1F – Continuous use / low impact
- 1B – Continuous use / medium impact

Risk Assessment

- Risk Assessment
  - Hazards and Controls
  - Level of risk
  - Chance of accident
  - CLEAPSS
  - In-house
  - Documentation

Risk Assessment

What is the meaning of … Risk

What is the meaning of … Hazard

What is a risk Assessment?

Who is responsible for a risk assessment in a School/College?

Why do we need risk assessments?

What should be on a risk assessment form?

Who should have access to a risk assessment?

COSHH

- COSHH
  - Hazards and Controls
  - Storage
  - In-house
  - Documentation – Data Sheets

COSHH

What does COSHH stand for?	How do we know if it is a COSHH substance?	How do we store a COSHH substance?
Who can get a COSHH substance from the storage location.	What should a school/college have with all COSHH substance? And Where do we get them from?	Is COSHH law?

Other documents of use

- BB81
- BB103
- Design and Technology Department Policy
- School/College Heath and Safety Policy

Other areas of Health and Safety in a Design and Technology Department

- PAT testing
- LEV Testing
- Maintenance
- Training
- Teaching and Learning



Health and Safety …. It's all a matter of balance!!!

Mr. Mark R. Elwell

designedbyme@btinternet.com

www.designedbymeconsultancy.com

07540850757