

Safety Webquest

WebQuest Description: This webquest will guide you into the world of Safety in all its entirety.

Grade Level: 9-12

Curriculum: Technology

Keywords: safety, OH&S, care, instructions, legislation

Published On: 2010-08-31 20:53:52

Last Modified: 2010-08-18 22:15:27

WebQuest URL: <http://zunal.com/webquest.php?w=67964>

Introduction

This Webquest has been designed for the Stage 6 Preliminary Design and Technology Syllabus. It looks at the topic of Safety and covers: Outcome P4.2 uses resources effectively and safely in the development and production of design solutions

Safety "refers to the state of being safe, that is, secure from harm, injury, danger or risk (Wesley, 2004). We know that if you feel safe within an environment, we work more effectively - however, accidents do happen. This is why certain safety rules and legislation are produced - to try and prevent fatal situations occurring.

According to Safe Work Australia's Document: Key Work Health and Safety Statistics Australia -- In 2006–07, there were 134 105 workers' compensation claims for serious work-related injuries or illnesses. This equates to an incidence rate of 14.1 serious claims per 1000 employees. Preliminary data for 2007–08 show there were 131 110 serious workers' compensation claims, which equates to 13.5 serious claims per 1000 employees. Male employees experienced twice the rate of serious injury or disease compared with female employees. A typical serious workers' compensation claim involves nearly four weeks absence from work. The Australian Bureau of Statistics' Work Related Injury Survey showed 64 out of every 1000 workers experienced an injury or illness in the workplace in 2005–06. However, half of these incidents involved less than one day or one shift absent from work. Work related injury and illnesses were estimated to cost \$57.5 billion in the 2005–06 financial year. This represented 5.9% of GDP.

This webquest will look at aspects of safety within all areas of Design and Technology and also the legislation that must be followed.

Tasks

You will be required, in groups of 2, to produce a Workplace Safety Brochure in your desired area of choice (e.g. Food Lab, Textiles Lab, Woodwork Lab, Metalwork Lab or the Computer Lab). The brochure can be designed with any platform you choose. It must:

be legible

be interesting

include relevant legislation

have an action plan

show important hazards

Process

PART 1 This step involves you, as an individual, looking at each laboratory in detail and acquiring safety knowledge for each. Please complete each sub-section of part 1. You will have 1 period to do so. a) The Food Laboratory aka. Kitchen 1. Go to the Virtual Kitchen. 2. Follow the instructions, ensuring to have a look at each PDF file that is presented to you with information about each hazard. 3. Complete the Kitchen Safety Quiz. 4. Upon completion, e-mail your final certificate to your teacher. The link to e-mail is directly under your certificate. (If you receive less than 70%, please redo the quiz). b) The Textiles Laboratory 1. Read the document Textile Tools. 2. Undergo the safety quiz regarding textile tools. 3. Upon completion, e-mail your certificate to your teacher. The link will appear when the quiz is finished. (If you receive less than 70%, please redo the quiz) c) The Woodwork and Metalwork Laboratory 1. Watch Health and Safety in the Workshop 2. Download Resource 1 (located in the Resources section of this page) and answer each question regarding the safety rules being breached. 3. Save document, and e-mail your answers to your teacher. d) The Computer Laboratory 1. View article Safety Rules for Computer Class 2. View picture: Ergonomics 3. In a MS Word Document, make a list of what you believe are the most important safety hazards outlined. Give at least 5. 4. E-mail this word document to your teacher.

BEFORE STARTING PART 2, YOUR RESPONSES NEED TO BE CHECKED/MARKED. YOU WILL RECEIVE EACH SECTION BACK AND THEN YOU MAY PROCEED.

PART 2 This part involves you, as an individual, looking at Occupational Health & Safety in detail. Please complete each step in this task. You will have 1 period to do so. 1. Follow the link to What is OH&S? 2. Read the information presented in the link and watch the video. 3. Take notes regarding the information in the video in your workbooklet, then type up these notes in a MS Word

Student did not complete subsections a) and b)

Part A – Subsection c)

Student received 90% or more for their worksheet answers

Student received 70% or more for their worksheet answers

Student received less than 70% for their worksheet answers

Student did not complete subsection c)

Part A – Subsection d)

Student produces more than 5 important safety hazards

Student produces 5 important safety hazards

Student produces less than 5 safety hazards

Student did not complete subsection d)

Part B – Video notes

Student produces extensive and detailed list of notes from video

Student produces coherent list of notes from video

Student produces notes, with some relevance to video

Student does not complete this section

Part B – Discussion Questions

Student produces answers to 2 of the questions presented, of 500 words or more, using correct terminology, references and analytical processes

Student produces answers to 2 of the questions presented, of 500 words or more, using correct terminology and references.

Student produces answers to 1-2 of the questions presented, with up to 500 words using correct terminology

Student does not complete this section

Part C - Definition

Group produces a detailed and referenced definition/description of a Safety Action Plan

Group produces a detailed definition/description of a safety action plan

Group produces a definition of a safety action plan

Group does not complete this section

Part C – Safety Action Plan

Group follows a clear Action Plan template, with all safety concerns mapped out and ways to combat them in detail.

Group follows a clear Action Plan template, with most safety concerns mapped out with some ways to combat them.

Group produces Action Plan, with some safety concerns mapped out.

Group does not complete this section

Part D – Brochure (Aesthetics)

Group produces a clear, legible brochure that is interesting.

Group produces a clear, legible brochure

Group produces a brochure

Group does not complete this section

Part D –Brochure (Information)

Group produces a brochure that contains information regarding: legislation, important safety hazards and a safety action plan. All information is concise, referenced and detailed.

Group produces a brochure that contains information regarding: legislation, important safety hazards and a safety action plan (may be missing one). Information is concise.

Group produces a brochure.

Group does not complete this section

Misc.

Student uses correct file naming conventions for all Parts.

Student uses correct file naming conventions for most Parts

Student uses correct file naming conventions for one Part

Student does not use correct file naming conventions

Category and Score	A	B	C	D	Score
				Total Score	

Conclusion

INFORMATION REFERENCES: Board of Studies (2009, September 28). Design and Technology Syllabus. Retrieved 19 August, 2010 from Board of Studies: http://www.boardofstudies.nsw.edu.au/syllabus_hsc/pdf_doc/design-technology-st6-syl-from2010.pdf

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IMAGE REFERENCES (IN ORDER OF APPEARANCE):

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A+ Paper – retrieved 25 August 2010 from: <http://www.corbisimages.com/images/572/46F385D1-2272-4EDE-8A96-52076E181609/42-17173989.jpg>
File of Books – retrieved 26 August, 2010 from: <http://www.kent.ac.uk/porton-down-project/Clip%20Art%20Books%20Bibliography.jpg>

Teacher Page

INTRODUCTION This Webquest was developed as part of Assessment Task 1 for the subject EDST448 - Technology Curriculum and Teaching 2 by Rachel Saare (Australian Catholic University Strathfield). It covers the topic of safety - with links to OH&S policy and specific hazards within technology labs.

LEARNER This lesson is specifically for students studying Design and Technology in Stage 6 (Preliminary). Students will have looked at safety in Stage 4 and 5, so this underlying knowledge will be helpful for this Webquest.

CURRICULUM STANDARD This Webquest takes content from the Design and Technology Stage 6 Preliminary course. It covers Outcome P4.2 - uses resources effectively and safely in the development and production of design solutions. Students learn about: - Safety * safety in the use of materials, tools and techniques * legislative requirements including Occupational Health and Safety. Students learn to: - implement safe work practices when designing and producing

PROCESS The Webquest is designed to last 5 periods (based on the fact a period runs for 50 minutes - adjust accordingly). Students are required to form groups for Parts C and D. It is not stipulated how they are to do this - my plan was to allow the students to choose their own team member however you may choose to make the partnerships yourself. The Webquest itself requires that you as a teacher understand and know the relevant legislation and the Occupational Health and Safety policy. Students are asked to look at this section themselves and include it in their brochure, so this can often be an obstacle as it is not spoon fed to them. This means that many students may have questions regarding this area so being knowledgeable on it is integral. Part C requires students to write their group members on the whiteboard. You may choose to use a Wikispace or something similar to sign up to groups.

RESOURCES NEEDED - computer for each student - internet access for each student - student account log ins - student email accounts - teacher email account - whiteboard with whiteboard markers (or Wikispace etc.) - websites (each have their links through the process, but you can also find them in the References tab if they are broken) - 1 classroom teacher is suffice

Standards

Credits

Other