



Stage 4 Technology (Mandatory)

Lucas Heights Community School

Rationale

Lucas Heights Community School (LHCS) is located at Barden Ridge, in the Sutherland Shire, south of Sydney.

It is a K-12 school with a current enrolment of 650 students in the K-6 area and 600 students in the 7-12 area. The school has a support unit with 20 students and has a staff of 105 including executive, teachers, administration and support unit aids.

The school has a large range of equipped rooms available including: food laboratories, a textiles & design room, computer laboratories, a multipurpose room used for electronics, wood technology and textiles & design, a wood/metal technology room, a technical drawing/CAD room and one seminar room.

The Technology and Applied Studies (TAS) staff consists of seven classroom teachers and one head teacher. While staff members have particular areas of expertise all will teach Technology (Mandatory) in 2005.

The school report student progress to parents each semester using outcome based reporting. The report records student performance on each outcome and the teacher's comment.

The school has a strong emphasis upon Gifted and Talented Programs for Year 7-8 students. These programs will be incorporated into the delivery of the Technology (Mandatory) syllabus, including the opportunity to enter competitions in Computing and the Minister's Young Designer Awards.

Teaching model

It is proposed that two teaching models will operate in the TAS key learning area at LHCS in 2005. Classes will rotate, mostly between two teachers each Semester (occasionally three). This allows for the development of positive relationships between teachers and students and among students. This rotation continues into Semester 2 with two or three new teachers presenting different design specialisations. All technology classes will have computer room access [1 period per cycle] built into their timetable.

Model 1 ... classes swap teachers at the end of Semester 1

Semester 1	
Teacher A	Teacher B
Class 7B	Class 7G
Class 8B	Class 8G
Semester 2	
Teacher A	Teacher B
Class 7G	Class 7B
Class 8G	Class 8B

In this model the classes complete a design project each term.

Model 2 ... classes have a three way teacher rotation at the of Semester 1

Semester 1		
Teacher A	Teacher B	Teacher C
Class 7R	Class 7W	Class 7RW
Class 7W	Class 7RW	Class 7R
Class 7RW	Class 7R	Class 7W
Semester 2		
Teacher A	Teacher B	Teacher C
Class 8R	Class 8W	Class 8RW
Class 8W	Class 8RW	Class 8R
Class 8RW	Class 8R	Class 8W

In this model the classes complete a design project each term.



Lucas Heights Community School: Course plan Technology (Mandatory)

Year 7

Design Project	Area of study	Specialisation	Technologies	Design brief	Design Project	Area of study	Specialisation	Technologies	Design brief
1 10 weeks	Products	Food design	Food technologies	<i>Healthy eating</i> You are a dietitian and cook at a popular school camp that is visited by schools from all over NSW. Your task is to plan well balanced meals for teenagers between the ages of 12-15 years.	3 10 weeks	Products	Industrial design	Timber technologies	<i>Flying high</i> Design and produce a toy model of a flying object suited to a child aged 4-8 years.
2 10 weeks	Built environments	Interior design	School developed technologies	<i>Room to move</i> Design or modify a teenagers bedroom to improve the use of space for study. Consider the functional, physical and material properties and safety aspects of your design.	4 10 weeks	Information and communications	Promotional design	Graphics technologies	<i>What's happening at LHCS</i> Design and produce a brochure to promote life at Lucas Heights Community School. You should consider the aesthetic, ethical and functional aspects of the design development.

Year 8

Design Project	Area of study	Specialisation	Technologies	Design brief	Design Project	Area of study	Specialisation	Technology	Design brief
1 10 weeks	Products	Accessories design	Textiles technologies	<i>Colour my world</i> Design and apply colour decoration to a piece of fabric and construct a cushion that would suit the furnishings of your bedroom.	2 10 weeks	Built environments	Architectural design	Model Making technologies	<i>Holiday house</i> An old homeless person who you have always been nice to has made you the beneficiary of his/her will. You have been given a level block of land with northerly views overlooking the ocean. Design a holiday house that is 90 sq. metres in size, has two



									bedrooms, takes advantage of the views and uses minimal energy for heating, cooking and lighting.
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3 10 weeks	Information and communications	Communication Systems design	Media technologies	<i>Read the sign</i> You are to design signage to communicate safety in technology classrooms. You should consider the aesthetic, socio-cultural, ethical and functional aspects of the development.	OR	<i>Get the message</i> In groups of three you are required to design, produce and evaluate a short video focusing on one event held at LHCS this year. The video is to communicate the achievements of our students to parents.	OR	<i>Carnival time</i> Design a video production of the bi-annual school fair. You should consider the aesthetic, ethical and functional aspects of the design.
4 10 weeks	Information and communications	Software design	Information technologies	<i>Wood database</i> Design and produce a database of Australian timbers and their uses.	OR			<i>PJ's 'R' Us</i> You are establishing a mail order company that sells pyjamas for children, ladies and men. Design, produce and evaluate a database to track customers and sales for <i>PJ's 'R' Us</i> .

Rotation matrix

Class	Term 1	Term 2	Term 3	Term 4	Class	Term 1	Term 2	Term 3	Term 4
7B	Healthy eating	Room to move	Flying high	What's happening to LHCS	8B	Colour my world	Read the sign	Holiday house	Wood database
7G	Flying high	What's happening at LHCS	Healthy eating	Room to move	8G	Holiday house	Carnival time	Colour my world	<i>PJ's 'R' Us</i>
7R	Flying high	What's happening at LHCS	Healthy eating	Room to move	8R	Holiday house	Wood database	Get the message	Colour my world
7W	Room to move	Healthy eating	Flying high	What's happening at LHCS	8W	Carnival time	Colour my world	Holiday house	Wood database
7RW	Flying high	What's happening at LHCS	Room to move	Healthy eating	8RW	Carnival time	Holiday house	Wood database	Colour my world
Focus outcomes for reporting: 4.1.1, 4.3.1, 4.3.2, 4.5.1, 4.5.2, 4.6.1					Focus outcomes for reporting: 4.1.2, 4.1.3, 4.2.1, 4.2.2, 4.4.1, 4.6.2				