Stage 4 Technology (Mandatory)

Manly Selective Campus

Rationale

Manly Selective Campus is part of the Northern Beaches Secondary College, located in North Curl Curl on the northern beaches of Sydney. It is a co-educational selective campus. The current enrolment of the campus is around 800 students, it has approximately 41 feeder primary schools.

Manly Selective Campus has a wide range of facilities available for the implementation of the new technology course. These facilities include 2 wood technology rooms, 1 metal/electronics room, 1 textile room, 1 kitchen and 2 multi purpose design and technology rooms. Students can access computer technology in four rooms. The computer room in the TAS block has 20 Mac computers and two other computer rooms have 20 PCs. Classes can also be booked into the learning centre in the library to use 30 PC computers. All computers at the campus are networked. There is also one computer in both the textiles room and design and technology room. A data projector is also located in the design and technology room.

In Year 7 the Technology (Mandatory) course will be presented in 6 x 60 minute periods per two week cycle. In Year 8 the Technology (Mandatory) course is presented in 5 x 60 minute periods per two week cycle. The classes will rotate three times a year through 13 week units. All technology classes are timetabled into the computer room for one period per cycle. The staff is experienced in the traditional home economics and industrial arts subjects and computing studies.

The campus has a strong emphasis on gifted and talented strategies including Blooms, Williams and Maker. In 2004 all staff will be inserviced on Gardner's Multiple Intelligences. These strategies will be incorporated into the delivery of the Technology (Mandatory) Years 7-8 syllabus. Middle schooling initiatives include student teams and problem solving units. Every KLA in Year 7 completes a teams unit and a problem solving unit which will be incorporated into the delivery of the Technology (Mandatory) course. Technology students will use the design process to complete problem solving units. In unit 2 all Year 8 students will participate in the Minister's Young Designer Award competition.

Agreed purpose and approach for teaching this course

On completion of this course students will have gained deep understandings about the:

- use of the design process to identify and solve problems
- use of reflective, flexible and creative thinking skills
- materials, equipment and processes used to produce quality solutions
- key concepts of the course and the relationships between and among those concepts
- value and impact of technology on the individual
- potential opportunities in the study of design and related fields.

Quality teaching practices that will facilitate these deep student understandings include:

- Lesson adaptation for a variety of learning styles
- Modelling of all student expectations by teacher
- Use of accepted curriculum delivery models for GAT
- Assessment based on Blooms and Multiple Intelligences
- High, explicit expectations
- Supportive classroom environment
- Meaningful discussion and development of thinking skills
- Core understanding of literacy and how it applies to technology.

The organisational approaches that will support these quality teaching practices and deep student understandings include:

- The concept of one course/ subject for 2 years
- A consistent approach across areas of study and through essential content
- Units of work which fit together to make a whole
- Pre-testing of students to determine prior knowledge
- Correct timetabling to allow rotations as prescribed by syllabus
- Quality student assessment monitored by Head Teacher
- A Professional development plan for TAS teachers.

Manly Selective Campus: Course plan Technology (Mandatory) Year 7

- 6x13 week units
- Digital media design unit will incorporate a student teams approach
- All units involve problem solving (design process)
- Unit 5, Year 8 will be used for entries in MYDA

Technology(Mandatory)	Unit 1 13 weeks	Unit 2 13 weeks	Unit 3 13 weeks
Focus outcomes	4.1.1, 4.1.3, 4.3.1	4.1.2, 4.2.1, 4.3.1	4.3.1, 4.3.2, 4.5.1
Common assessment	Assessment task 1: focus outcomes	Assessment task 2: focus outcomes	Assessment task 3: focus outcomes
Contributing outcomes	4.1.2, 4.2.1, .4.2.2, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	4.1.1, 4.1.3, .4.2.2, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.1, 4.6.2	4.1.1, 4.1.2, 4.1.3, 4.2.1, .4.2.2, 4.4.1, 4.5.2, 4.6.1, 4.6.2
Areas of study	Products	Products	Information and communications
Design specialisation	Accessories design	Industrial design	Digital media design
Technologies specific content	Textile technologies	Electronics technologies Timber technologies	Media technologies
Design situation	You are a textile designer who specialises in designing surface decoration for fabrics.	You are an industrial designer who has been contracted to solve storage problems.	You are part of a team who has decided to enter into the 13/30 video festival.
Design brief	Design and produce the surface decoration for a piece of fabric which will be used to create an accessory.	Design and produce a storage system for an identified need.	Design and create a digital media presentation using a digital camera and video editing software.
Class assessment	Assessment task 1 Technologies specific content	Assessment task 2 Technologies specific content	Assessment task 3 Technologies specific content

Manly Selective Campus: Course plan Technology (Mandatory) Year 8

Technology(Mandatory)	Unit 4 13 weeks	Unit 5 13 weeks	Unit 6 13 weeks
Focus outcomes	4.2.2, 4.3.1, 4.4.1	4.3.1, 4.5.2, 4.6.2	4.3.1, 4.3.2, 4.6.1
Common assessment	Assessment task 4: focus outcomes	Assessment task 5: focus outcomes	Assessment task 6: focus outcomes
Contributing outcomes	4.1.1, 4.1.2, 4.2.1, .4.2.2, 4.3.2, 4.5.1, 4.5.2, 4.6.1, 4.6.2	4.1.1, 4.1.2, 4.2.1, .4.2.2, 4.3.2, 4.4.1, 4.5.1, 4.5.2, 4.6.1,	4.1.1, 4.1.2, 4.2.1, .4.2.2, 4.4.1, 4.5.1, 4.5.2, 4.6.2
Areas of study	Built environments	Products	Information and communications
Design specialisation	Interior design	Food design	Promotional design
Technologies specific content	Model making technologies	Food technologies	Information technologies
Design situation	You are an interior designer in the year 2030. A client has recently purchased a house built around the turn of the century that needs updating.	You are the owner/chef of a café on the Northern Beaches. The Manly Daily has just rung you to say a food critic will be visiting your café in 9 weeks for the purpose of writing an article.	You are a designer working for Milton Bradley in the product development department.
Design brief	Select a room and design and construct a model to show the new interior.	Design and produce a lunch menu for your café. Prepare a two course meal for the food critic.	Design and produce a prototype for a game and the promotional material to accompany/promote the games launch.
Class assessment	Assessment task 4 Technologies specific content	Assessment task 5 Technologies specific content	Assessment task 6 Technologies specific content