Stage 4 Technology (Mandatory)

Karabar High School

Rationale

Karabar High School and Distance Education Centre is located in Queanbeyan which is in the Southern Highlands of NSW, in close proximity to Canberra.

The current enrolment is approximately 700 students, with 250 full time and 300 single subject enrolments in distance education. The cultural mix of students includes a significant number of Macedonian, Serbian and Aboriginal students.

The health and life studies (HALS) and industrial arts/computing faculties are combined and work closely together with the organisation and teaching of DAT in Stages 4, 5 and 6. In Technology (Mandatory) *mega briefs* will be completed which embrace the expertise of all faculty members.

Karabar High School has a wide range of equipment and facilities for the teaching of wood, metal, technics, technical and CAD drawing, food technology, textiles technology and design and technology. Year 7 and 8 classes are given priority for the use of specialist rooms. Our faculty has access to a bank of 16 networked computers in the drawing/computer room, with A4/A3 printing facilities. Additionally, we have a small bank of computers in the textile area, three other computer labs and classes can access the school's learning centre.

Year 7 is organised into mixed classes while in year 8 single sex classes operate. DAT is delivered in blocks of 4 classes with all classes receiving the equivalent of 8x40 minute lessons per two week cycle.

Students are issued with a report in week 8 of Term One which is a profile to allow parents initial feedback for the year. Our reports are outcomes based, providing feedback on up to 8 outcomes each semester and reporting against a scale from *Beginning* to *Working Beyond*.

Agreed Purpose Statement

By the end of the course our students will have the ability to:

- design, produce and evaluate quality solutions that relate to a need they have established
- justify design solutions
- work safely with a variety of materials, tools and techniques
- develop their creativity and become more responsible, independent learners.

Students should demonstrate an understanding of the central ideas and concepts related to each brief by exploring relationships, solving problems and drawing conclusions.

The approach at Karabar High School ensures a quality learning environment through the development of positive relationships between teachers, students and amongst peers. Teacher expertise also enables high and explicit expectations to be identified and communicated to students.

The teaching of design related content at the same time by all classes in Year 7 and then in Year 8 allows for the use of a common reporting format.

Karabar High School: Rotation matrix

Design-related content is addressed by all classes at the same time to allow for consistency in assessment and reporting
Teachers A & B, C & D, E & F, G & H work in a team teaching type environment where students may move between rooms in order to access resources.

	Year 7		Year 8	
Class group	**Semester 1**	**Semester 2**	**Semester 1**	**Semester 2**
DAT 1	Teacher A + B	Teacher C + D	Teacher E + F	Teacher G + H
	Design project 1	Design project 2	Design project 3	Design project 4
+	**Area of study**	**Area of study**	**Area of study**	**Area of study**
DAT 2	Information and communication	Built environments	Products	Products
	Design specialisations	**Design specialisations**	**Design specialisations**	**Design specialisations**
	Digital media systems	Landscape design	Accessories design	Industrial design
	Technologies	**Technologies**	**Technologies**	**Technologies**
	Information technologies Food technologies	Graphics technologies Model-making technologies	Textiles technologies Mixed materials technologies	Timber technologies Metal technologies
	Rooming	**Rooming**	**Rooming**	**Rooming**
	Computing room + kitchen	Computing room + DAT room	Textiles rooms	Wood + metal prac rooms
DAT 3	Teacher C + D	Teacher A + B	Teacher G + H	Teacher E + F
	Design Project 2	Design Project 1	Design Project 4	Design Project 3
+	**Area of study**	**Area of study**	**Area of study**	**Area of study**
DAT 4	Built environments	Information and communication	Products	Products
	Design specialisations	**Design specialisations**	**Design specialisations**	**Design specialisations**
	Landscape design	Digital Media Systems	Industrial Design	Accessories Design
	Technologies	**Technologies**	**Technologies**	**Technologies**
	Graphics technologies Model-making technologies	Information Technologies Food Technologies	Timber Metal	Textiles Mixed Materials
	Rooming	**Rooming**	**Rooming**	**Rooming**
	Computing room + DAT room	Computing room + kitchen	Wood + metal prac rooms	Textiles rooms

Karabar High School: Course plan Technology (Mandatory)

Year 7	Semester 1 or 2
Title: School improvement	**Title: Electronic recipe book**
Design project 1 **20 weeks**	**Design project 2** **20 weeks**
Area of study: Built environments	**Area of study:** Information and communications
Design specialisation: Landscape design	**Design specialisation:** Digital media design
Technologies: Graphics technologies Model-making technologies	**Technologies:** Information technologies Food technologies
Design project 1 description Students are to analyse and redesign an area of the school playground which will have a 'Sun Protection' theme. This design should focus on enhancing/improving the environment at KHS's playground to include a hand generated folio.	**Design project 2 description** Students will design an electronic copy of a recipe book. Each class will produce a CD ROM with the theme focusing on healthy snacks. Students will undertake research with food tasks and experiments and will generate images and recipes for the recipe book to include a hand generated folio.
Significance: Promotes two important community issues in our environment and sun-safe practices and therefore direct relationship to real life.	**Significance:** A direct relationship to real life focusing on healthy food choices which are self-centred. Links with life skills and decision making.
Focus outcomes: 4.1.1, 4.1.2, 4.3.1, 4.3.2, 4.5.2	**Focus outcomes:** 4.1.1, 4.1.2, 4.3.1, 4.3.2, 4.5.2
Contributing outcomes: 4.2.1, 4.2.2, 4.4.1, 4.5.1, 4.6.1	**Contributing outcomes:** 4.2.1, 4.2.2, 4.4.1, 4.5.1, 4.6.1,

Year 8	Semester 1 or 2
Title: Outdoor ready	**Title: Private garden**
Design project 3 **20 weeks**	**Design project 4** **20 weeks**
Area of study: Products	**Area of study:** Products
Design specialisation: Accessories design	**Design specialisation:** Industrial design
Technologies: Textile technologies Mixed materials technologies	**Technologies:** Timber technologies Metal technologies
Design project 3 description Students are to design and manufacture a range of accessories suitable for an outdoor activity in the local area, which could include: hats, socks, first aid kit or carry kit. An electronic folio will be generated to support the development of the design project.	**Design project 4 description** Students are to design and produce an aesthetically pleasing item to use for growing plants. The students will work with timber to make a container and will also produce innovative metal frames incorporating scrollwork to demonstrate aesthetic design. An electronic folio will be generated to support the development of the design project.
Significance: Encourage the use of mixed materials and textiles relevant to the local climatic and environmental conditions.	**Significance:** Develop life skills relevant to changes in housing styles as well as developing safe practices in two practical areas. Students will also gain satisfaction in using tools and machines to produce a product.
Focus outcomes: 4.1.2, 4.3.1, 4.3.2, 4.5.1, 4.5.2	**Focus outcomes:** 4.1.2, 4.3.1, 4.3.2, 4.5.1, 4.5.2
Contributing outcomes: 4.1.1, 4.1.3, 4.2.1, 4.2.2, 4.4.1, 4.6.1, 4.6.2	**Contributing outcomes:** 4.1.1, 4.1.3, 4.2.1, 4.2.2, 4.4.1, 4.6.1, 4.6.2