Stage 4 Technology (Mandatory)

Hunter School of the Performing Arts

Rationale

Hunter School of the Performing Arts (HSPA) is located in Broadmeadow, approximately seven kilometers from the Newcastle CBD. There are approximately 1080 students enrolled at Hunter School of the Performing Arts from kindergarten to year 12. Approximately 10% of this number is enrolled in the primary department of the school.

Students are selected to attend the school on the basis of their aptitude for a performing art, via an audition and interview process typically conducted in kindergarten and year 7.

The drawing area for Hunter School of the Performing Arts extends throughout the Hunter Region and Central Coast. HSPA students are predominately Anglo Saxon, however, the school also hosts the Millabah Aboriginal Dance Company which accounts for approximately 45 of our students.

The TAS faculty is comprised of a Head Teacher and eight classroom teachers. Of this number, three were originally trained as home economics specialists and three as industrial arts specialists. One of the latter completed a conversion course in the early 1990s after spending 20 years working in industry. Our two computing specialists were originally trained as science teachers and our ninth member of staff has a background in both Human Society and Its Environment and science.

All faculty members are conversant and capable users of technology. Staff members have additional credentials in Hospitality, Entertainment Industry Training, Radio Broadcasting, Electrical Engineering, Retail and Information Technology.

Hunter School of the Performing Arts works with a ten day cycle of six 53 minute lessons per day. Year 7 technology classes are exposed to one teacher for six lessons per cycle for six months. They address two design projects within this time. Classes then rotate for a further six months with a second teacher. Teachers deliver design projects that are related to their own expertise and training. Year 8 technology classes currently operate on a similar rotation system that is complicated by timetable imperatives that necessitate the splitting of several classes between two teachers during any six month period. This means that some Year 8 classes are studying two design projects concurrently.

Hunter School of the Performing Arts has four computing rooms, two food laboratories, two woodwork rooms, an entertainment industry technology work centre and a textiles room, that can be accessed by junior technology classes. Demand for these rooms is high, however, junior technology has been assigned a high priority by timetablers and to date needs have been accommodated.

Students at HSPA have a very strong performing arts orientation. Whole school initiatives such as the biennial school musical production, the Shakespeare Festival and seasonal music festivals provide many opportunities for our students to shine.

School reporting is performed on a semester basis and outcomes-based reporting is being progressively introduced.

Agreed Purpose Statement

In the process of completing the Stage 4 Technology (Mandatory) course at Hunter School of the Performing Arts, students will develop deep understandings and skills relating to:

- the independent initiation of design projects and investigations that reflect an understanding of needs and opportunities
- the effective communication of ideas to a diverse audience using a range of media and methods
- the safe, competent and confident application of a range of tools and techniques, including ICT tools, in a variety of contexts
- self reflection and the evaluation of their own design projects.

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

- provision of explicit criteria for the assessment of the quality of work that students produce
- communication of high expectations of all students
- encouragement and rewarding of conceptual risk taking
- provision of a strong, positive and supportive learning environment

- promotion of mutual respect among teachers and students.

The organisational approaches that will be used by Hunter School of the Performing Arts to support these quality teaching practices and deep understandings include the:

- appropriate use of the expertise, skills and knowledge of specialist teaching staff to provide high quality instruction and establish appropriate benchmarks for student achievement
- delivery of the design content of the course in a sequence that is common to all classes, rather than linking specific design experiences to particular design projects. This approach will ensure that there is a logical progression in the development of design skills and understandings throughout the two year course
- use of eight design projects in the delivery of this course to ensure that students are exposed to the greatest breadth of study possible.

Hunter School of the Performing Arts: Course overview Technology (Mandatory)

Title	Home alone: Survivor	Windows of opportunity	Think outside the box	The crown jewels
Duration	10 weeks	10 weeks	10 weeks	10 weeks
Area of study	Products	Information and communications	Products	Products
Design specialisation	Food design	Information systems design	Industrial design	Jewellery design
Technologies	Food technologies	Information technologies	Timber technologies	Polymer technologies
Focus outcomes	4.2.2, 4.3.1, 4.6.1	4.2.1, 4.3.1, 4.3.2, 4.5.1, 4.5.2, 4.6.1	4.1.2, 4.3.1, 4.3.2, 4.5.1, 4.5.2	4.1.1, 4.2.1, 4.2.2, 4.3.1
Contributing outcomes	4.1.1, 4.2.1, 4.3.1, 4.3.2, 4.5.1, 4.5.2	4.1.1, 4.1.2, 4.1.3	4.2.1, 4.6.1	4.5.1, 4.6.1, 4.5.2

Title	SiteMaster	Backyard bitz	Ebb and flow	Sew what! It's my room!
Duration	10 weeks	10 weeks	10 weeks	10 weeks
Area of study	Information and communications	Built environments	Built environments	Built environments
Design specialisation	Promotional design	Landscape design	Environmental design	Interior design
Technologies	Media technologies	Mixed material technologies	Model-making technologies	Textiles technologies
Focus outcomes	4.2.1, 4.2.2, 4.3.1, 4.5.1, 4.5.2	4.1.1, 4.2.1, 4.3.1, 4.3.2	4.1.1, 4.1.2, 4.2.1, 4.3.2	4.1.2, 4.3.1
Contributing outcomes	4.1.1, 4.1.3, 4.3.2, 4.4.1, 4.6.1, 4.6.2	4.2.2, 4.6.1, 4.5.2	4.1.3, 4.2.2, 4.4.1, 4.5.2, 4.6.1, 4.6.2	4.1.1, 4.1.3, 4.2.1, 4.2.2, 4.3.1, 4.3.2, 4.5.1

Hunter School of the Performing Arts: Rotation matrices Technology (Mandatory)

Two class rotation

	Term 1	Term 2	Term 3	Term 4
Class 1	Teacher 1 DP1 Food Lab	Teacher 1 DP2 Computer Rm	Teacher 2 DP3 Technics Lab	Teacher 2 DP4 Technics Lab
Class 2	Teacher 2 DP3 Technics Lab	Teacher 2 DP4 Technics Lab	Teacher 1 DP1 Food Lab	Teacher 1 DP2 Computer Rm

	Term 5	Term 6	Term 7	Term 8
Class 1	Teacher 1 DP5 Computer Rm	Teacher 1 DP6 Technics Lab	Teacher 2 DP7 Food Lab	Teacher 2 DP8 Textiles Rm
Class 2	Teacher 2 DP7 Food Lab	Teacher 2 DP8 Textiles Rm	Teacher 1 DP5 Computer Rm	Teacher 1 DP6 Technics Lab

Three class rotation

In this approach:

- Design related content is planned for the course
- Design related content is addressed at the same time by all classes
- Class groups rotate between teachers
- Class groups rotate between specialist rooms

	Term 1	Term 2	Term 3	Term 4
Class 1	Teacher 1 DP2 Computer Rm	Teacher 2 DP1 Food Lab	Teacher 3 DP3 Technics Lab	Teacher 1 DP5 Computer Rm
Class 2	Teacher 2 DP1 Food Lab	Teacher 1 DP2 Computer Rm	Teacher 2 DP8 Textiles Rm	Teacher 3 DP3 Technics Lab
Class 3	Teacher 3 DP3 Technics Lab	Teacher 3 DP4 Technics Lab	Teacher 1 DP2 Computer Rm	Teacher 2 DP1 Food Lab

	Term 5	Term 6	Term 7	Term 8
Class 1	Teacher 2 DP4 Technics Lab	Teacher 2 DP6 Technics Lab	Teacher 3 DP7 Food Lab	Teacher 1 DP8 Textiles Rm
Class 2	Teacher 3 DP5 Computer Rm	Teacher 1 DP7 Food Lab	Teacher 2 DP4 Technics Lab	Teacher 2 DP6 Technics Lab
Class 3	Teacher 1 DP7 Food Lab	Teacher 3 DP5 Computing Room	Teacher 1 DP8 Textiles Room	Teacher 3 DP6 Technics Lab

Hunter School of the Performing Arts: Design project plans Technology (Mandatory)

Unit No.: 1
Title: Home alone: Survivor
Duration: 10 weeks
Area of study: Products
Design specialisation: Food design
Technologies: Food technologies
Description of design project: Students will create an individual *Survivor Guide* containing 10 customised recipes for 7 main meals and 3 snack items that could be used to feed oneself whilst parents are holidaying overseas (a purely theoretical concept!). Students will prepare 6 recipes which they will then personalise and add an additional 4 recipes to create their own nutritionally sound, skill diversified recipe "Survival Guide" booklet. The booklet may additionally contain a nutritional guide, hygiene and safety requirements and skill guides.

Unit No: 2
Title: Windows of opportunity
Duration: 10 weeks
Area of study: Information and communications
Design specialisation: Information systems design
Technologies: Information technologies
Description of design project: Design, create and present a multimedia presentation that depicts the individual student's achievements at Hunter School of the Performing Arts. Students will be required to: • Apply a range of software programs. • Use a variety of input and output devices. • Utilise this presentation as a platform for authentic assessment.

Unit No: 3
Title: Think outside the box
Duration: 10 weeks
Area of study: Products
Design specialisation: Industrial design
Technologies: Timber technologies
Description of design project: Design and manufacture a decorative timber container that can be used to store mementos and keep sakes. Students will be required to: ▪ consider the aesthetics, function and material properties that impact on its development.

Unit No: 4
Title: The crown jewels
Duration: 10 weeks
Area of study: Products
Design specialisation: Jewellery design
Technologies: Polymer technologies
Description of design project: Design, produce and present a collection of jewellery manufactured from a range of polymer materials. Students will be required to: • Identify and experiment with a range of polymer materials • Develop a unifying design theme • Select and correctly apply polymer tools • Present finished ensemble to maximum effect

Unit No: 5
Title: SiteMaster
Duration: 10 weeks
Area of study: Information and communications
Design specialisation: Promotional design
Technologies: Media technologies
Description of design project: Design and create a web site that promotes Hunter School of the Performing Arts as the school of choice for performing artists in regional NSW. Students will be required to: • Conduct research into the nature and application of web sites. • Apply the principles of effective design when constructing a web site.

Unit No: 6
Title: Backyard Bitz
Duration: 10 weeks
Area of study: Built environments
Design specialisation: Landscape design
Technologies: Mixed material technologies
Description of design project: Students are to design an item or article to enhance their own built environment. Students will create an outdoor house plan and then focus on a single design aspect (such as a veranda, pot plant garden, lawn design, recreational areas, and fencing plans). This aspect will then be the focus of the student's practical skill development.

Unit No.: 7
Title: Ebb and flow
Duration: 10 weeks
Area of study: Built environments
Design specialisation: Environmental design
Technologies: Model-making technologies
Description of design project: Design an efficient food production area for a design and technology food laboratory which emphasises efficiency, safety, health and hygiene. Students will be required to: • Analyse workflow within a food preparation environment • Become familiar with the principles of Occupational Health and Safety • Examine the characteristics and properties of model-making and systematic planning for model development.

Unit No: 8
Title: Sew what! It's my room!
Duration: 10 weeks
Area of study: Built environments
Design specialisation: Interior design
Technologies: Textiles technologies
Description of design project: Students will "deconstruct" their own personal bedroom space and analyse design aspects to recreate an aesthetically pleasing and individually functional interior design plan. To encapsulate the individuality of their overall room plan students will use a range of developing textiles skills to produce a "reflection of self" textile poster.