Island School Curriculum

Subject: ICT
Year/Course: Year 7

Knowledge and Understanding
By the end of this course students will have developed more critical approaches to web based information, some understanding of information gathering processes as well as an understanding of a range of search tools to help them with research tasks. They will discuss and apply research strategies to a range of situations related to alternative fuels in transport as a topic. Students will get the opportunity to present information in a variety of ways and be encouraged to consider audience and purpose in the nature of presentation. Students will know how to do basic video editing and will have tried to put together a persuasive trailer for a TV program called Future Car. As part of digital literacy development students investigate copyright and will better understand the term and how it relates to the use of technology in everyday life. Students will also get an introduction to basic programming concepts and approaches.

Subject Specific Skills
The key areas of skill development for assessment at this level are Information literacy, Media and Communication, Technical Competence and Project Management. The skills are criterion referenced and support the development of appropriate attitudes and behaviours towards ICT and student use of digital technologies. In this sense, the purpose of the course is as much about teaching generic skills as it is about learning about ICT in and of itself. The emphasis on process skills .

Transdisciplinary Skills
The project based nature of the work undertaken allows for a variety of teaching approaches and learning styles with significant opportunities for both small group and individual work, peer assessment and self evaluation. The subject specific skills are to a large degree transdisciplinary in nature although the nature of technical skill development is obviously orientated toward the solving of ICT related problems. Programming develops abstract thinking skills and the concepts of prediction and experimentation.

Assessment
There is a culture of open assessment processes that involve self assessment, peer assessment and teacher feedback. Students will regularly show work to their peers and this creates opportunities are used by teachers to generate open discussion and draw out formative comments from the class. Students will often use the comments of others as a basis for their own reflection on work.

Challenge for All
Whilst there is a need to cover some common aspects of ICT development we are moving towards a philosophy (especially further up the school) where students can be set ICT problems but are left to decide to some degree about what software they will use to solve

it. At this key stage more direction is given and options are put forward by teachers. Another strategy is that tasks can be framed more generically so as to avoid specific software. For example we will talk about “presentations” and the options students may have with this rather than specifically state that we want students to do a “Powerpoint”. Many of the tasks are low floor, high ceiling and that fact that group work forms a significant part of the way in which students work helps students to support each other.

Subject: **ICT**
Year/Course: **Year 8**

Knowledge and Understanding

By the end of this course students will have worked co-operatively in groups to research and develop their own health food snack for sale at school. The task builds on the knowledge developed in Year 7 Food Technology. They will design the packaging and develop an advertising campaign that involves poster design and a TV advert. They will explore more fully video as a media communication form and understand shot type, camera angles and how these are used to tell a story in video. They will use their understanding and analysis of video products to plan their own video projects in sufficient detail. The emphasis is on individual responsibility within group work and they use a web site structure to facilitate communication and co-operation as well as to display work and share files. Students will plan the production of their snack using spreadsheets and try to estimate the profit they might make through sales. They will be lent startup capital of around HK$100 for initial purchases. They will then sell their product over a number of days and account for their income and expenditure.
Students will also choose an aspect of Internet Safety to explore e.g. Interactions on social networks, on-line relationships, Internet scams, personal data security, and personal computer security. They will work on producing a digital product that shows their understanding of the topic. If time allows then students will further develop their programming understanding through exposure to the Scratch programming environment.

Challenge for all

The health food snack problem is a very realistic problem based learning experience that will challenge all students to work co-operatively to identify individual roles and responsibilities within the group to make their product a success. Some tasks are completed by all students (such as the design of the packaging) but will then be discussed and a single final design decided upon by the group. Other tasks, such as the production of the video advert, require co-operation, co-ordination and organization to be successful. Differentiated tasks, such as the spreadsheet work that leads up to the planning of production also help to allow students to realize their potential.

Subject: **ICT**
Year/Course: **Year 10**

By the end of this course it is expected that students who have studied it will have quite different bodies of knowledge within the realm of information and communication technology. This is deliberate as the Cambridge IE Award in Applied ICT, which is the course studied in Years 10 and 11, is fundamentally a framework for developing the transdisciplinary skills and qualities of:-

- Planning and Research
- Technical Competence
- Originality and Creativity
- Commitment and Involvement
- Communication
- Fitness for Purpose
- Evaluation

As such ICT problems are used as a mechanism for encouraging students to grow and develop in these areas. Overt teaching of specific software is replaced by the teacher supporting students in their own selection of appropriate ICT tools to solve ICT related problems. Project based approaches are used in Year 10 that focus on strands within the assessment framework and students produce a digital portfolio of work to show their progress. The use of this portfolio and the tools it provides allow students to show what they have learned, how they have learned it and the reasons for their choices.

Assessment
Assessment is ongoing and formative based on the 4 level criterion referenced IE Award mark scheme evidenced through a digital portfolio managed by the students. Ongoing monitoring of student progress in lessons is supplemented by regular reviews of the portfolio.

Subject: **ICT**
Year/Course: **Year 11**

Knowledge and Understanding
As per Year 10 ICT

Assessment
Assessment in Year 11 is centred around a student devised project that has to demonstrate progress in the 7 assessed areas of:-

- Planning and Research
- Technical Competence
- Originality and Creativity
- Commitment and Involvement
- Communication
- Fitness for Purpose
- Evaluation

The project itself can be a group or individual and may be connected to any topic or theme. Students are encouraged to explore projects that may help to reinforce other areas of the curriculum and so combine learning approaches. Students develop a digital portfolio and a learning journal to evidence their progress with the project. Regular monitoring by teachers and the use of formative comments is designed stimulate project development and ensure progress. Final assessment will result in students passing the award at Foundation, Standard, Advanced or Innovator level. Whilst it is possible for students of this age to achieve Innovator level it would be a very rare occurrence as this qualification is designed to go beyond the age of 16. As such Innovator level is considered by the exam board as nearing professional standards. Accordingly we expect students at this level of schooling to mostly be working at Standard or Advanced level.

Subject: ICT
Year/Course: Yr 12 BTEC Interactive Media

Knowledge and Understanding
By the end of this course students will have a experienced a range of projects in the area of Interactive Media including Digital Graphics, Web Animation and Digital Video. They will have developed a more technical understanding of these areas and how the technical considerations apply to particular applications. Students will also understand more about the need for research in the media industry and the connection between research and media product development.

Subject Specific Skills
Planning and producing digital graphics
Planning and producing web animation sequences
Planning and producing digital video

Transdisciplinary Skills
Students will develop their research skills and explore firsthand the connection between research and product development. Where possible they are given practical problem based learning situations which reflect real world examples. Most of the work is individually based but there are opportunities for students to work in small groups and so develop their abilities to co-operate, coordinate and collaborate. As such an emphasis on project research, planning and management is evident.

Assessment
BTEC awards 3 levels of attainment; Pass, Merit and Distinction. During the course students will complete both assessed and non-assessed tasks. When assessed tasks are to be done students are given a brief which stipulates the task, the assessment criteria it covers and a description of the types of evidence students will need to produce at the various levels of attainment. Students are given the opportunity to submit work and then receive feedback on what they have done. They are then given time to develop their ideas further in the light of this advice before final submission and formal assessment.

Subject: **ICT**
Year/Course: **Year 13 BTEC Interactive Media**

Knowledge and Understanding
By the end of this course students will have had more open ended opportunities to further develop their technical and aesthetic understanding of the areas of:-

- Digital Graphics
- Web Animation
- Digital Video

Students will be expected to understand key terms within these areas from a technical perspective and be able to apply them to student devised project tasks. These tasks will come from the needs of the school in the area of interactive and digital media and may take the form of promotional materials for school events or the production of video records of these events for consumption over the Internet.

Other areas are as per Year 12