



Implementing BSKC Curriculum Projects

Key Stage 3

The BSKC is open to year 9 students and above. Students are required to work in teams of three in the BSKC; all the curriculum projects can be taught in normal classes.

Overall Project Aims

- To motivate and engage students by teaching the National Curriculum through a relevant and exciting learning vehicle
- To prepare students for competition in the British Schools Karting Championship through associated subject study of the concepts and knowledge required to win.
- To develop students ability to apply their subject knowledge and understanding to a motorsport context
- To develop student organisational, communication, problem solving and application skills
- To enable students top apply their enterprise learning to a real life commercial situation
- To enable schools to implement a cross curriculum project

Overall Project ethos:

The BSKC curriculum project provides a structure of content, mapped across the National Curriculum, related to competition in the BSKC that enables schools to develop and implement an exciting and meaningful project vehicle for students aged 13 and 14. The projects are designed so that students can follow a cross curriculum project that is taught by subject experts in subject specific sessions. The projects provide three separate curriculum implementation strategies. Projects require management by a project leader (guidelines are provided) and specific lesson planning for the target audience by classroom teachers. The projects have been designed so that standard school planning and quality assurance schemes can be easily followed. Exemplar lesson plans are provided for STEM subjects. Learning objectives are provided for each project. Session specific objectives can be developed from these and the subject content, matched to the target audience abilities.

BSKC KS3 Curriculum Project Support for Schools

Management implementation, Student personal skill and School council development are provided in separate documents along with guidance on how BSKC curriculum projects can enhance learning, support Specialist School aims and help development planning.

Full schemes of work, detailed lesson plans, classroom resources and assessment schemes are available at extra cost-contact BSKC for further details.

Staff training to enable development and implementation, targeted to your school needs, is available from Andrew Howlett Education – www.andrewhowlett.co.uk or andy@andrewhowlett.co.uk

Project Learning Structure – (For session content see Curriculum Maps Spreadsheet)

The curriculum project consists of two parts – core and support learning.

BSKC Core Learning

1. Citizenship session 1



2. Enterprise
3. Mathematics
4. Science
5. Sport

BSKC Support learning

1. Art
2. Design Technology
3. Citizenship (Sessions 2 – 8)
4. English
5. Geography
6. History
7. ICT
8. Music

Implementation Structures

1. Curriculum week long project (25 hours)

Overview: A week long, self contained, cross curriculum learning, STEM and Enterprise based, project consisting of 25 hour long sessions. The sessions are time limited and extension of specific sessions is not possible within the structure.

Overall Project Objectives:

That students:

- know and understand the Science of acceleration, braking, grip and handling;
- know and understand the factors that affect human reactions and how to improve them;
- know and understand how to maximise their competitiveness in motorsport;
- know and understand how to analyse and evaluation timing data from races;
- know and understand how to set a budget plan;
- know and understand how to find and keep sponsors;
- can pitch a business idea to experts;
- can develop appropriate strategies to improve their competitiveness.

2. Full cross curriculum project taught through the normal timetable

Overview: An 83 session project operating across the majority of the national curriculum for year 9. The project provides flexibility for each school to implement the programme over an 18 week period using timetabled, subject based lessons. The curriculum shows the order that sessions need to be taught in for each subject area. Whilst linking together, the subject sessions are only interdependent for timing in Science and Sport, ICT and Mathematics in order to coordinate study between the subjects. Sessions are not time limited – subjects can extend and develop sessions to ensure differentiation/ follow on student thought processes and provide extension work – within the weekly timetable structure.

Overall Project Objectives:

As for the stand alone week project plus:

- know and understand why karts are designed and built as they are;
- know and understand how steering and braking systems work;
- know and understand hydraulic systems;



- know and understand the effects of drugs on the ability to drive;
- know and understand how the leisure industry interacts with the community;
- know and understand the social history of the motor industry in the UK;
- apply the design process to develop a working kart chassis;
- apply their knowledge and understanding to discuss the environmental effects of motoring;
- apply their knowledge and understanding of ICT to develop team based support;
- develop their ability to write for a target audience;
- apply their knowledge and understanding to develop team logos and themes.

3. Full cross curriculum project taught as fortnightly project days

Overview: An 80 session coordinated fortnightly project for schools implementing cross curriculum development as a regular, off timetable, activity. The curriculum map shows the timetable and structure of the project, providing all the required interdependence. Sessions are time limited.

Overall Project Objectives:

- As 1 and 2 above

Key Stages 4/5

The BSKC KS4/5 curriculum project is a series of learning projects linked to the BSKC, kart design and championship management that relate directly to examination study. Projects can be implemented as taught units or student led projects as required by the examination syllabus and as matched in the separate document.

The project combines study in a series of different examination subject across a team of three students. Learning is shared within the team by regular review meeting (in tutor or learning review time) where students discuss what they have learned, how it develops their competitiveness and targets for future learning

Overall Project Aims:

- To engage students in relevant and exciting examination study through the application of their learning programme to the BSKC
- To raise examination performance by providing students with the motivation to maximise their learning in order to compete to win
- To develop student organisational, target setting and problem solving skills
- To enable students to apply their examination learning to a real life competition
- To develop students enterprise learning through applying it to the BSKC

Overall Project Ethos

The BSKC Key Stage 4/5 curriculum project provides a series of projects based around competing in the BSKC to augment and support learning in examination and core subjects. The projects are examination specific where possible and are designed to be taught by subject/ syllabus experts.

The project is divided into core and extension projects, with the extension projects enabling schools to develop projects to level 3 through Diploma and GCE studies.



The project provides a series of content identified sessions of varying length, but the major design and build projects are designed to fulfil the length of study requirements for major examinations. Non design and build projects are designed to enable students to apply their learning in core subject or examination areas and add to their personal development and skill set.

Each project is designed to need minimal funding other than existing expectations for materials/ coursework/ resources in subject areas.

Team set up is important to success. Whilst each project can be delivered as a “stand alone” project for an individual, members of a team should span the entire range of projects in order to ensure complete coverage of the core content. Team should, therefore, consist of students whose examination options cover the range of examinations as identified in the examination match document. Work in each project is individualised, with input from one member, so examination regulations for coursework are upheld. The team review sessions enable students to learn from each other and set stretching targets for each other in order to maximise competitiveness.

BSKC KS4/5 Curriculum Support for schools

Separate guidance on personal development, teamwork, problem solving, individualised and independent learning is supplied with the project.

Detailed schemes of work, learning resources, assessment schemes and organisational guidance are available at extra cost – please call BSKC for further details.

Staff training in project implementation and support is available to match your school needs through Andrew Howlett Education – www.andrewhowlett.co.uk or andy@andrewhowlett.co.uk

Project Structure (see Curriculum Maps Spreadsheet for content details)

BSKC Championship Core Content

- Kart chassis design and build
- Steering design and build
- Braking system design and build
- Control Systems design and build
- Driving Skills
- Racing Skills
- Acceleration and Braking
- Grip and Handling
- Human racing
- Team Uniforms
- Personnel Management
- Logistics Management
- Financial Management
- Testing and Evaluating
- Reporting
- Championship management

BSKC Extension Projects

- The Kart Stand
- The Intelligent lap board



Learning Objectives

Projects are provided with content and activity information for each session and are designed to be open ended with no ceiling of knowledge or content other than in taught sessions. Learning objectives need to be matched to the specific examination syllabus and ability of the students. Specimen learning objectives for levels 2 and 3 as appropriate are provided with the detailed schemes of work.

Assessment

The project is designed to be used alongside standard school and examination assessment policies. Detailed guidelines on assessment schemes and specific assessment points are given within the schemes of work.