Setting and running up BSKC Curriculum Projects

Management and Leadership Guidelines

Guidelines on setting up, management and implementation are provided for the Project Leader, Heads of Department/ Subject, Classroom teachers and tutors/ learning mentors.

Project Leader Guidance Notes

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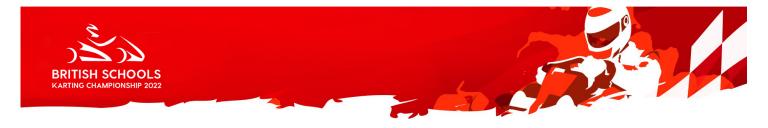
Project Evaluation

Preparing for SMT

Before presenting the project to SMT:
Analyse the school development plan, identify which parts of the plan the identified outcomes for the BSKC curriculum project can support. Identify the key messages of the BSKC curriculum project and how they relate to the aims of the school and the objectives in the school development plan. Identify key players in the middle management and teaching staff of the school who would/ could be motivated to lead the implementation.

Key messages for SMT:
What is the BSKC?
The BSKC Curriculum projects are a series of cross curriculum modules that bring the excitement and motivation of competitive motorsport into the classroom. The projects provide a structure in which teachers can utilise the BSKC as the vehicle for national curriculum/ examination study. The materials detail how the project matches against the National Curriculum and Examination subjects and provides a scheme of work structure for developing the lesson plans. The learning that is undertaken through the projects directly supports and enhances the ability of team members to compete in the BSKC – the national karting championship for schools.

The projects themselves are carefully matched to provide effective vehicles for the delivery of Enterprise and STEM learning in a relevant and motivational way.

What difference does the BSKC make to schools?
Evaluation of the effect of the BSKC in schools through structured analysis of teacher and student responses shows that it:

- Raises motivation of students to learn through competition – "Why can't the next world champion come from our school?"
- Improves behaviour through enabling the curriculum to connect with hard to engage students;
- Raises levels of student achievement by providing the motivation to be the best and removing the false ceilings of knowledge and understanding provided through NC and examination studies – students continue to develop their learning in order to increase their competitiveness;
- Provides a real-life vehicle for STEM learning – whether through the STEM club or in the curriculum;
- Delivers real management and leadership development through the BSKC School Council programme;
- Promotes and develops student self assessment, review and target setting;
- Promotes and develops student team work skills;
- Promotes and develops student organisational skills;
- Improves student confidence.

The project is an effective vehicle to deliver meaningful and realistic Enterprise education to Key Stage 4 and 5 without having to invest in an outside sourced and delivered enterprise day or activity.

What will it cost?
To enter teams into the regional and national finals is £127 +vat per team of three. The schemes of work and guidelines that support the curriculum project are included with entry to the championship. The funding required for the curriculum project extra to the provision of the normal curriculum or STEM club is minimal. The guidelines also provide a structure in which the School Council can develop a sponsorship structure that should pay back the initial entry fee and cover the cost of travelling. The racing competition is held outside school time so there are no cover costs. The project notes identify where existing budget areas and grants can be used to support the implementation and explain how the project can be used to produce multiple outcomes from a single budget input.

How do we make sure it works and delivers the quality we expect in our lessons?
The challenge comes with detailed guidelines for Senior and Middle managers, classroom teachers and learning mentors explaining what needs to be done, how it is best done and how to evaluate that it has worked to the standards expected by OfSTED and the School Improvement Partner programme.

How is it organized?
The Projects work from year 9 upwards. The year 9 project comes in a variety of structures ranging from a 21 session STEM club programme through to a full cross curriculum project. There are a range of structures in which to implement the cross curriculum project that can be used to fit our needs. There are different structures from a week long project through to a one day a fortnight cross curriculum project. The 14-19 projects consist of a series of modules that are matched to examination content and syllabus or to personal or functional development. All the projects can be taught in classes. The projects are broken down into easily recognisable subject based chunks.

Project Planning and setup
As with the implementation of any educational initiative the project needs to be "seeded" with all stakeholders in order to bring everyone on board and ensure effective implementation. To ensure the stakeholders come on board, they need

understand and appreciate the outcomes and added value that are delivered through the project. In particular people need to know how the project will enable them to meet the quality and achievement requirements efficiently and effectively as well as how it will deliver development objectives and a range of national initiatives.

To minimise the "that's different – we can't...." syndrome - match the delivery structure to maximise the effect of the key leaders who will support the subject, produces the implementation structure without too much disruption to the everyday organisation and structure.

Bring the key players together in a development meeting to seed the project and provide them with the information and background so that they can seed their teams.

Budget identification

Prepare a budget for the project – especially if the School Council programme is being used to show that it will cost nothing extra than normal lessons and explain that, in delivering the objectives for a variety of different initiatives (Enterprise, Gifted and Talented, personal development, cross curriculum development, raising achievement etc.) it will release other funding into the school arena at a time when budgets are being squeezed.

Also prepare a time and management budget demonstrating how the quality assurance and monitoring of the project will require no more time and effort than is expected for the normal curriculum.

Curriculum Organisation

Depending on the choice of project structure, map the project against how it can fit against the school timetable or cross curriculum day timetable.

The Key Stage 3 Curriculum Maps show the order in which classes need to be taught each week for implementation into an existing timetable, or the sessions that need to be taught each day in a cross curriculum day structure (assuming 5 hours teaching a day and 1 cross curriculum day per fortnight) or a full week long curriculum project for year 9.

Heads of faculty/ Subject need to be shown how the deployment of staff will be utilised across the project – this should provide minimal disruption to the normal but does allow HoF/S to allocate specific staff if they wish.

For implementing into an existing timetable, analyse the order of subjects each week to identify the specific timetabled lessons where each session will be taught. Inserting this over an existing scheme of work may be contentious – hence the need to "seed" the project.

Quality of Delivery

Identify key monitoring strategies and points in line with the school quality assurance policy. It is essential that the project is not thought to require extra monitoring. Matching it to the existing programme reinforces the projects as being "normal curriculum delivery" rather than a one off project. Provide the middle managers with key points for monitoring and evaluation matched to the school development aims, the priorities for performance management across the school and the project outcomes.

Communication

A line management map, showing the routes for communication and role descriptions is provided as a separate document "BSKC KS3 Cross Curriculum Management Map".

Set up a separate communication channel for the project – use an information page from the on-line management system in the school or commandeer a notice board in the staff room. Set up an email group for all middle managers. classroom teachers and support staff who will work with the project and provide regular updates explaining the

achievement that has occurred within the project and news bulletins about what is happening around the project including the school council development. Provide a confidential feedback box for staff specifically for the project and monitor the contents regularly.

Project Management
Produce a project management or Gantt chart, detailing what will happen, when it is due to happen and who will make it happen for the management of the project. Set and communicate the time and content targets from the chart and then set up a monitoring or reporting structure to provide you with evidence that everything is being done as planned. Before the project starts, check personally with all management stakeholders that they understand their part in the project and the requirements and accountability that it entails. Provide all stakeholders with a regular progress update (daily for the week long project, weekly for the full project or monthly for the fortnightly project)

Monitoring Learning
A change to the structure or nature of classroom teaching sometimes makes teaching and support staff focus on logistics or planning process rather than educational outcomes. Encourage departments and subjects to discuss the progress towards the project objectives and the effect of the project on the students and student achievement as part of their regular meeting pattern. Provide them with an easy to read précis of the expected project outcomes for quick and easy reference.

Monitoring Assessment and Achievement
Schedule the school quality monitoring programme to coincide with the project wherever possible. Ensure that Heads of Faculty/ Subject undertake their normal quality assurance programme with the project and don't assume that it is being done elsewhere. Achievement monitoring should be carried out as normal on the outcomes of lessons and the learning therein. Match the levels achieved to the value added targets for individual students, classes and subjects. Analyse the levels achieved within the project against the expected progress that would be produced through the delivery of the normal school curriculum.

Project Evaluation
Set up the project evaluation structure before seeding the project. Match it to the normal evaluation methods in use in the school but be clear about the evidence you will need and the judgments that will be taken. Utilise the regular review and departmental meetings wherever possible to provide the discussion and team evaluation.   Undertake the normal school evaluation of quality on the entire project. Use staff and student feedback – especially that from School Council.

Head of Faculty/ Department/ Subject

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Subject Staffing

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Subject Staffing

Your subject teaching staff are individuals and have different skills and qualities. To ensure the best possible results, you will need to evaluate the individual strengths of your team members and allocate them within the project according to those strengths. The curriculum projects provide students with a considerable degree of ownership of the project and the desire to develop their own learning over and above the objectives for the lesson matched to NC or examination achievement. They will ask and probe to find answers to questions that apply the knowledge and understanding to new and unusual situations. Teachers who enjoy and thrive on competition are most suitable and, normally, the first to get involved.

Subject Timetabling

If your subject area is one that will utilise the design and build modules, you will need to ensure that it is delivered in an appropriate working area with access to a computer suite and a resources bank that is flexible as students will look for components and materials that may not form the norm in the national curriculum or examination study. If the project is being taught as a week-long project the year timetable will be collapsed whilst the project is being taught. This provides you with the opportunity to move teachers and their specialisms around to match the needs of each group and project. You may also wish to regroup the students to provide a consistency of learning style or interest to stimulate the development of the work and ease the role of the teacher.

Subject resources

The BSKC curriculum projects do not require equipment or resources other than those in normal use in secondary schools. The design and build projects do require students to produce full size component for go karts and steering mechanisms, braking and control systems from cars and bikes are useful to demonstrate current solutions to car design. If these are not available readily within school, the internet does provide detailed explanations and animated descriptions of typical mechanisms through websites such as http://auto.Howstuffworks.com Standard write up and recording systems should be used within your subject area to ensure consistency and quality.

Provision of SEN support

As SEN support should be individually based or class specific, the provision of differentiation within the projects is through the learning objectives for individual sessions and the nature of support and extension activities for the target group. The exemplar lesson plans provide examples of objectives for the project and suggestions on how differentiation and support could be achieved in the lessons

The major provision of individualised support in the UK for secondary students is through the use of classroom support assistants and teaching assistants. OfSTED review has shown that the best practice for the use of such aides is through partner planning with the teacher in advance of the lesson, although it also shows that this can be the biggest area of weakness in SEN support for those on level 1 and 2 of the code of practice. As all classroom workers will be involved in supporting the learning desires of the students, you will need to meet with the subject specific team who will be in the lessons in your subject area. Go through the curriculum project with them, the expected outcomes and what the project has been shown to do. Prepare the team for the style of questioning and the need to accept that they may not know the answer. Focus on the need to develop abstract thinking skills and the need to develop the ability of the student to apply their knowledge – there will not a correct answer, but there may be a better one!

The BSKC is especially suitable for the Gifted and Talented, providing a platform for real personal development outside the classroom norm. Use the support team to help identify development targets with the students and then work with the teachers to find solutions to those development needs.

Subject Pedagogy

The BSKC curriculum projects do not specific a particular pedagogy or learning style. In this way you can tailor the subject requirements and preferences to meet the project. All that is required is that the plenaries are focused on c=developing the application of knowledge and not just a vehicle for AfL evaluation of achievement of objectives.

Subject based assessment monitoring

The BSKC Curriculum Project is not designed as an add-on or extra to student learning. It is a project that should be fully integrated as a normal learning vehicle for the NC or examination syllabus. In this way, the expectation is that the quality assurance strategies that are normally applied to examination study are applied to the project. Explain to your team the focus of the monitoring for the project and the evidence that will be collected to enable judgments to be made. Build a review of the assessment into the normal meeting structure as a core of the evaluation evidence.

Subject target setting

Value added target setting for individual students should be carried out as normal. The BSKC, however, does provide above normal motivation and achievement and, as such, targets for achievement should be set, as a minimum, to the upper quartile. As with any unit or module, analysis of the levels achieved against target should be carried out as part of the project evaluation.

Quality assurance

Any initiative or new curriculum needs to be carefully monitored to ensure that it matches the expectations and actually raises achievement or meets other specified outcomes. The BSKC curriculum project should be monitored in line with the

school policy as would any curriculum unit. The project, however, encourages the development of soft and foundation skills and requires the teacher to develop a meaningful and relevant lesson plan to ensure the development of thinking skills to abstract levels. It is important, therefore, that the quality of lesson plans are monitored and those lesson plans reviewed and shared amongst the team to ensure a clear understanding of what has happened and the quality within it. If this is not the norm within the department, ask for the project based lesson plans to be circulated prior to teaching. The quality can then be monitored and they can also be circulated to support staff to ensure effective preparation. Evaluation of the quality of lesson planning, compared to the norm within the school and department, should be added as part of the subject specific evaluation.

Subject evaluation

As part of the project evaluation, each subject will be required to evaluate and judge the quality of planning, learning and achievement that was produced through the project. The evidence that you will need to make the judgment should be discussed with all stakeholders prior to the project and circulated and discussed during regular subject based meetings during the project. Teacher and students views on the style and quality of the learning should also be included. The project leader will outline the structure of the evaluation, what each area is expected to produce and the core targets for the project that the evaluations will need to judge against. It is important that you share these targets and the structure and nature of the evaluation with your team. If they are aware and understand the process, you are far more likely to get objective response during the process. Try the Tesco method of evaluation – the customer satisfaction survey. Students are the first person learning client and have a clear view on how the project will have helped them learn or developed their ability to think. It is useful to produce a student response form to use before the project starts. If your department or school is using instant feedback techniques from students, or is considering doing so, take the opportunity the project presents to use that process to the full.

Use the standard subject or department meeting programme as a vehicle for regular discussion of the project. Put the project as a regular item on departmental meetings throughout the project and encourage ongoing discussion over coffee and during planning, preparation and marking time.

Set yourself a weekly management list of things to communicate to your team and publicise this. This not only makes your team feel part of the project management, it guarantees your teaching staff will remind you if you forget something!

Classroom teacher

Contents:
Lesson planning to match target audience

Student learning support;

Classroom differentiation;

Class teaching and learning quality;

Student work assessment;

Progress towards targets monitoring;

Lesson evaluation;

Subject project review

Lesson planning to match target audience
As with any normal lesson, the BSKC Curriculum project modules need to be tailored to match the needs, abilities, strengths and starting point of the target audience. The NC matches and examination content show where the modules fit in with the schemes of work and the exemplar lesson plans provide suggestions for differentiation and support.

The modules do not come with compulsory or even suggested learning strategies other than the need to promote the ability to reason and think in an abstract manner. The modules are designed to develop knowledge and understanding in order that the students apply that knowledge and understanding to try and become more competitive in the BSKC.

As you will be asking the vast majority of students to think outside their normal comfort zone (about 70% of all adults are not normally abstract thinkers) it is important that you are aware of the learning styles and methods that suit the individuals and group so that you are using the most efficient vehicle to promote that reasoning.

You will be asked to explain things or rate suggestions that are outside your normal classroom experience. Abstract reasoning requires you to relate your answers to situation or circumstances that the audience understand in order to enable them to make the leap. It is vital, therefore, that you are fully aware of the interests and strengths of the individuals outside the classroom on which to hang your responses.

Student learning support
When setting the learning objectives for each session you will need to cover the range of abilities within the group. AfL records from your previous lessons will enable you to evaluate the current levels of the students in your group. The changes to the National Curriculum content means that setting objectives for the KS3 can no longer be easily matched to content statements. You will need to consider the level statements to relate to the content required in order to set the appropriate starting level. The department will discuss learning and in-class support for the project, but you will need to ensure that you have covered the range of reasoning abilities in addition to literacy, numeracy etc. You will need to support "concrete" thinkers in their reasoning through providing exemplars of the thought process and guiding them through the process, providing concrete examples of each stage. Putting a concrete thinker on the spot by demanding an abstract response can be an upsetting even frightening experience, so individuals need to be guided carefully.

Classroom differentiation
You will need to identify strategies to bring students who are struggling to meet their target up to the target level. This can only be done on an individual basis. Set the objectives at the different levels within the range of targets of the group, starting with the average value added target level, through the upper quartile and to the level above the upper quartile.

You will need to identify extension support strategies and materials to enable extension from the objectives for Gifted and Talented students and those whose reasoning powers have enabled them to work through the required activities at a faster pace than estimated. To do this, think of a process of reasoned, abstract thinking that could relate to the subject matter and base the extension work around that process. Do not be afraid to set the students into research mode to develop their understanding.

Class teaching and learning quality
The BSKC curriculum project doesn't specify techniques or strategies for teaching – that's your job! Match the content requirement to the most appropriate learning vehicle for that thought and learning process for your group. Use student

feedback to support the development of strategies. Don't be afraid to ask them what they think would improve the lesson. You may get the odd "different teacher" but then you would expect that. The vast majority of suggestions will be positive and meaningful – after all, they do experience a huge number of lessons and teachers in the time in school and students are very insightful in their analysis of what is beneficial to their learning.

Student work assessment

The work within the BSKC modules should be assessed in the normal way and in line with school policy. Be SMART, however, in identifying the target for assessment in the work. Utilise the plenaries as well as the recorded outcomes and focus on the sections of the work that provide you with the evidence of their reasoning and application of knowledge.

Progress towards targets monitoring

This should be carried out in the normal way and to the normal routine, although the BSKC does encourage students to set achievement targets outside academic attainment. Share the upper quartile targets with students and encourage them to self assess their work against your assessment criteria. Explain how the focus for assessment will be judged and ask the students to assess their own work on completion, keeping a record of their self assessment to measure progress towards their academic value added targets.

Lesson evaluation

No initiative or project is guaranteed success - the impact has to be evaluated to ensure it meets the targets. You will be involved in the subject based evaluation and your views will go forward to make up the evidence base for the formal evaluation. In addition to the progress made by students, you should evaluate the effectiveness of the lesson content in supporting progress in thinking, the learning vehicles you used to deliver this and the reaction of students. Written evaluations of each lesson, as an addendum to the lesson plan, are most useful here. At the end of the project, review these evaluations to identify the most successful vehicles for thinking development and the areas where changes could make improvements.

Subject project review

The entire project will be reviewed formally within your subject area and the resulting report will be taken to the senior management as part of the evidence base for formal evaluation. Your head of department/ subject will tell you the evidence that has been agreed to be collected as a part of the evaluation before the project starts so collecting it will not be guess work. The project will be a regular agenda item for subject meetings during the duration of the project. In the end, the evaluation is not a matter of justifying the existence of the project; it's a vehicle for building improvement and raising achievement. Build yourself a checklist of the evidence that you need to collect and refer back to it on a regular basis to ensure that you haven't forgotten anything.

Tutors/ Learning Mentors

Contents: Team Support;

                                      Team target setting support;

                                      Team progress review

Team Support

The BSKC curriculum project is taught in normal classes but students compete in the racing part of the BSKC in teams of three. The only time these teams will come together will be in tutor time or in learning review time. It is vital that the teams are encouraged to share their experiences and learning. As the leader of those activities, start each review by encouraging each team member to explain what they have learned since the last meeting and how that will help the team be more competitive. Work with the team members to identify areas that they feel need revisiting to ensure deep learning and to identify areas that they feel should be researched to provide background understanding.

Teams need to work well together – they will be allocated to teams, they do not choose. This will mean that some teams will need support in working effectively together. There is an entire module in the 14-19 project that takes them through effective teamwork, but they may well need reminding of the strategies and processes of partnership.

Team Target Setting Support

The BSKC curriculum projects encourage students to set targets for performance outside the academic value added targets. You will need to support them in setting targets for team work, driving capacity and racing performance. For teamwork targets, ensuring that everyone knows what they have to do for the coming period before the next review meeting and how they are going to do it is a good starting point. Promote discussions on improving communication between team members and use the internet to research key points for effective team work. In terms of academic performance, the BSKC raises levels of achievement against the norm through extending motivation and making learning relevant. Work with students to review their academic targets to take the upper quartile as the base target and extend to the next level above the upper quartile as this supports the drive for competitiveness and achievement.

Team progress review

You will need to pull the team achievement together to evaluate progress against the overall target - to be able to win the BSKC - on a regular basis. The curriculum project provides the knowledge and understanding to increase competitiveness through understanding how the machines and human beings work. You will need to ask them "What else do we need to do in order to stand a chance of winning the championship" as the final question for all review meetings. Review the response and encourage the team to turn their comments into a single action or development that they can all work together to achieve within the next week.

Remember Lewis and Jenson also went to school and went karting – look what happened to them!