

# propathfinders

INNOVATIVE PRACTICE

## Fast track to success

*A kart racing championship aims to promote STEM subjects, encourage teamwork and improve behaviour*

SAM CREIGHTON



### The project

**Approach** Using kart racing to promote STEM subjects and improve behaviour

**Started** 2007

**Leader** Will Tew, founder of 3T Racing

**Website**  
[www.bskc.co.uk](http://www.bskc.co.uk)

### Boy racers

World champion Formula 1 racers who started out kart racing include: Michael Schumacher, Ayrton Senna, Alain Prost, Fernando Alonso, Kimi Räikkönen, Jenson Button, Lewis Hamilton and Sebastian Vettel.

### The background

"When I was at school, I wanted to be a Formula 1 driver but there was nothing you could do to help you towards that – it was all football and rugby and I was no good at them," says Will Tew.

At university, Tew became fascinated by karting, launching the British Universities Karting Championship in 2001 while still a student at Imperial College London. But he felt that schoolchildren were missing out on the opportunity to try it. "I thought how awesome it would be to give young teenage students this opportunity," he says. "It's something I wish I'd had as a kid."

So in 2007, he launched the British Schools Karting Championship (BSKC). As a graduate in information systems engineering, he was keen to show that the sport was "about more than boy racing" and so gave the project an educational slant, developing ways to use karting to teach STEM (science, technology, engineering and maths) subjects.

### The project

The BSKC hosts a competition each year in which schools can enter teams of three to race in local, regional and national heats. Lesson

plans linking STEM subjects to the principles behind karting can be downloaded from the championship's website.

"Teachers are a resourceful bunch," says Tew. "Many of them have gone back and created lessons about lap times and engines and the mathematical equations behind things like grip."

The process of designing and building a chassis or a braking system for a kart can be tied to syllabus requirements for engineering GCSEs. Pupils are also encouraged to design team uniforms, which can be slotted into textiles lessons.

The championship has also been used by some schools and educational groups as a way of motivating students. The Wheels Project in Bristol, for example, takes pupils who are having difficulties in mainstream education and tries to develop in them an interest in mechanics and motorsports. It has even used the BSKC to encourage good behaviour, getting pupils to build a kart but only allowing those who meet set standards for behaviour and attendance to take part in the championship.

Tew believes that the project can also help gifted pupils, as it shows how theories can be applied in real-world situations and allows participants to try more advanced engineering than they might find on their school's curriculum. In addition, he thinks that the championship has character benefits: the teams all need to work together and "keep a cool head", as any mistakes could cost them precious lap time.

### Tips

- Approach your local karting circuit to see what they can do for you; pupils may want a lesson or two to get used to the sport.
- Ask teachers what lessons they think karting, and the principles behind it, could help with and plan how to implement them.

### Evidence that it works

Since the project began, the BSKC has received nearly 100 letters from participating groups saying how useful they found it. Tom Downing, a teacher from an East London academy, said that it helped children "in dire need of positive enrichment" to forge friendships, gain confidence and get a base in technological development.

ALEX ROACHE