The next James Dyson

From pitching their ideas and seeking investment to setting up micro-businesses, today's pupils are busy developing their entrepreneurial skills. Eleanor Doughty reports

"Something is wrong," begins David Goodhew, headmaster of Layton Upper School in West London. "People who go through school being spoon-fed and thinking in an algorithmic way are going to get replaced in the workforce. What you need are people who can think out of the box."

Mr Goodhew is one of many heads in the independent sector awake to the critical need for his pupils to experience more from school life than just academia. Not just in the field of sport and music, but entrepreneurship and enterprise too.

For his part, Mr Goodhew has established the Think Out of the Box project at Layton, which came to him in conversation with former Genesis Ironman and musician Peter Gabriel, who is a Layton parent. The idea is simple: successful individuals are filmed being interviewed about their experiences of "thinking outside the box" and the results are published on the school's website. This, Mr Goodhew says, is a practical way of enabling pupils to see how their lateral-thinking skills can be put to good use in later life. The project is in its early stages; the first videos have featured Mr Gabriel in conversation with engineer and inventor Mary Lou Ippen and BBC arts editor Will Gompertz.

The school's approach, in general, is about building a broad mindset to make students better prepared for their future endeavours. "It's about the habits of mind and the thinking skills that are required," says Mr Goodhew. "You need that for entrepreneurial activity."

At Sevenoaks School in Kent, a feeling of enterprise wafts through the school. It is "experimental," says Julie Redding, the school's head of entrepreneurship. "Schools>
can no longer prepare students for specific jobs. They need to be preparing their students with entrepreneurial skills.

It's more than profit-making that Sevenoaks have in mind though. It's social enterprise too. "We're conscious that we want to be developing leaders who will understand their ethical responsibilities," a survey conducted by Mrs Redding found that 55 per cent of students said they would be interested in setting up a social enterprise or charity. "To hear that there's more of a focus on that than there is on profit-making is quite interesting," she says.

Mrs Redding identifies a link between the enterprising nature of her charges and the fact that Sevenoaks runs an IB-only sixth form programme, which offers them a well-rounded experience. "I think it is linked to the approach of the IB, in terms of looking to have really well-rounded students who look at things differently."

Sevenoaks students are involved in a variety of pursuits. Some students got the opportunity to develop their own social enterprise while others heard Baroness Karren Brady, sporting executive and star of The Apprentice, talk about her career and offer advice for young people starting out. Meanwhile year 8 pupils took part in the £10 Challenge, where the aim is to turn £10 into £100 in a month using their entrepreneurial initiative. Their enterprising pursuits ranged from selling bath bombs, lip balms and personalised plant pots to washing cars.

At Canford School in Dorset, business studies teacher Leeland Pearce is part of a new generation of teachers who are inspiring students through their own experiences. "All of a sudden, that golden path of doing GCSEs, A levels, and then going to university with all of these companies coming to look for you changed," says Mr Pearce. "I had friends going to scores of job interviews with every bit of paperwork but not getting jobs."

He is mired to ensure that his students do not experience this and for the last three years has spearheaded a programme called Business Enterprise - Canford's own version of Young Enterprise. Students spend five or six weeks putting their business plans together "with very little input", then pitch their business, gain investment and run the businesses for 12 to 14 weeks. "At the end of that time, we wind the businesses up, the profits go to charity and we keep the investment to run the scheme again the following year."

It's an incredible experience, says Mr Pearce, and a valuable one too. "The great thing with it is that students make awesome mistakes." Last year, for instance, one of the groups ran a vegetable delivery service. "One week they meant to order 2kg of leeks, but forgot to put a decimal point in place and ordered 20kg."

Making mistakes is essential, agrees Julie Redding at Sevenoaks. "One of the things we want to do more is create these safe experiences for students to try things, experiment and experience things. If it means they need to go down the wrong avenue and then come back then we need to allow them to do that."

Canford pupils set up a beanie hat business, designing and marketing hats from scratch
Beachborough introduces pupils to technology early on; here, they prepare to race their electric car at a Goodwood Greenpower race.
Prep schools are taking an entrepreneurial approach too. At Beachborough, a co-ed prep school near Buckingham, headmaster Jeremy Baylis is making physical efforts to build for the future. The school's new TED centre, for technology, engineering and design, opens this month (September).

The school is located just 15 minutes from Silverstone, the home of British motor racing, and with a number of parents involved in engineering, the project made total sense. Presented with an opportunity to revitalise the school's IT offering, the head consulted local engineering companies to find out what they wanted from graduates coming into the business.

"They have graduates coming from university with degrees in X, Y and Z but not necessarily the skills they need in the workplace, " says Mr Baylis who hopes that introducing pupils to technology early on will sow the seeds. The TED programme means that not only will pupils leave school with a background in coding and regular IT skills but are adept at robotics, a branch of computer science that takes in mechanical and electrical engineering and makes computing in the classroom a "less abstract endeavour."

"Our ethos is one of a broad curriculum," adds Mr Bains. "Yes, we want exam success, yes, pupils are successful in that traditional area, but we also know what's likely to get them on the radar of the boss in the world of work."

At Millfield in Somerset, headmaster Craig Considine is putting down foundations. From this month (September), pupils will be able to study for a BTEC Level 3 in Entrepreneurship, including units on financial literacy and international business.

A brand new business centre is due for completion next year - the Millfield Centre for Enterprise, featuring 14 classrooms and a business hub, which will be available for use by local enterprises. It's part of developing the school's credentials outside the world of sport, in which it is a gold medal winner in the independent school sector. But sport and business mix well, and Mr Considine is keen to encourage pupils to think outside the confines of their on the pitch talents.

As he says: "It's about helping pupils to understand how they can monetise their talents and take them a stage further, off the pitch and into the world. We want our young people to be focused on those things rather than just being a participant."