BAKING IMPOSSIBLE HAS LED TO CHILDREN ACROSS THE WORLD TAKING TO THEIR KITCHENS TO CREATE THEIR OWN EDIBLE ENGINEERING DESIGNS.

DON'T STAY IN YOUR LANE

Baking and engineering have never been natural bedfellows until Andrew Smyth came along. The former Great British Bake Off contestant turned Netflix star has created a whole new genre that has grabbed attention everywhere. Irena Barker pinned down the world famous 'bakineer' and discussed the importance of exploring what makes you happy in school, work and life.

"On the Tuesday I could be researching a future aircraft for Rolls Royce and on Wednesday I could be trying to crack the perfect recipe for baked Alaska, it's a fun juggle," says a smiling Andrew Smyth as he describes his typical working week.

The 31-year-old works four days a week at the sharp end of aircraft design, and keeps one day aside to promote "Bakineering", his imaginative fusion of baking and engineering that first emerged when he was a contestant on 2016's Great British Bake Off.

He has come a long way since he first made his moving cog-shaped pork pies for cooking legend, Mary Berry. Recently, the Northern Irishman has found international fame as a judge on the Netflix gameshow "Baking Impossible", a cookery/engineering show where teams of engineers and bakers are set a series of ambitious "Bakineering" tasks.

Based on Andrew's own ideas (he is executive producer on the show after pitching the concept to Netflix), the pairs have a set time to create pastry boats, gingerbread skyscrapers built to withstand earthquakes, edible bridges and more. It's a thrilling and often hilarious watch where the line between genius success and miserable failure can be as thin as the fondant icing.

One of the most hair-raising episodes that showed how hard Bakineering can be featured contestants making robots out of cake, a kit from Makeblock, and driving them around a course.

"There was a lot of failure. They all made them far too heavy... the clever teams did something with a long tail or an extension," says Andrew, recalling the fiendish challenge.

A global hit, "Baking Impossible" has led to children across the world taking to their kitchens to create their own edible engineering designs.

Andrew devised the concept of Bakineering several years ago, after he realised baking was a way to engage people in engineering who might not otherwise be interested. He then developed a series of live shows and started touring them at science festivals and other events.

He says "the way to everybody's heart is through their mouth," so baking provides a great way to pique people's interest in engineering.

"Even though what I'm doing every day at Rolls Royce

isn't as frivolous as Bakineering, when you have that sense of solving a problem, it still feels great.

"But it's very hard to convey that to a child, whereas if you're showing that in this accessible way, that thrill of understanding something using an analogy of something they know really appeals to them."

The Baking Impossible show has also highlighted the importance of cross-disciplinary teams, says Andrew. There is increasing recognition of the benefits of blending the arts and sciences, with many schools now embracing the concept of "STEAM" – Science, Technology, Engineering, Art and Maths.

"It was always the hope when we were putting together Baking Impossible that it wouldn't be two people who stayed in their lane and just chucked in results together," says Andrew.

"The aim would be that... they become these kind of blended experts at the end and the engineer would be making baking calls and the baker would be making some engineering calls and in the best teams that is what they did.

"Before the series I always banged the drum that we are too quick to put ourselves in silos sometimes, this idea that we're either left brain or right brain, you're either going to go down the science route or you're going to go down an arts and humanities route. But it's just not the way life's played out for me because I get joy from both of them."

The idea of "staying in your lane" is obviously quite alien to Andrew, who says he is happy to be a "jack of all trades" who enjoys

music and singing as much as he does baking and aircraft design.

But what inspired his wide range of interests?

At grammar school in Northern Ireland, he says, he wanted to be a pilot, but soon realised aircraft engineering might produce more job opportunities and prove more interesting.

He didn't study cookery or design technology at school, but he "loved physics and maths" and excelled in them. His family inspired him in the kitchen.

He says: "My family have always been big eaters, when I think back there was a lot of baking going on in the house. My brother would make a pavlova, that was his thing, dad would make the shortbread, mum would be at the mince pies and in recent years I've tried to bring the wildcard to the table."

A couple of cookery summer camps in his tweenage years may also have proved instrumental, he adds, although he didn't get seriously into cookery until after he left Cambridge University.

"At university there were quite a few burnt banana breads, that was all it amounted to," he says.

Now Baking Impossible is finished, Andrew is touring his live shows and also promoting STEM to young people through various outreach projects. He was recently involved in "Bedtime Stories for Very Young Engineers" a project designed to counteract young children's pre-conceived ideas of who might do certain careers.

"By the time you're actually talking to children about careers, some of the biases are already set in," says Andrew.

Thirty engineers from around the UK were taught story-telling techniques and wrote a bedtime story for two to five-year-olds, loosely themed around their engineering discipline. Funded by an Ingenius grant from Royal Academy of Engineering, Andrew's is already one of several currently on YouTube. [https://www.youtube.com/watch?v=lad7xtunvuw]

And it's no surprise Andrew has been a popular choice with TV producers and others looking to promote engineering to young people. A sunny, smiling manner and infectious enthusiasm – with a sprinkling of geekery – has proved the perfect recipe. For Baking Impossible, he was given a stylist who devised a look for him that their mood board called "Easy Cambridge Chic".

"I'm a Northern Irish boy, I don't have airs and graces," he says, "I got told that I'd be having a call with a stylist before I went out there which I found hilarious."

He then spent a full day in LA having his outfits chosen and adjusted by a seamstress. "I was totally aware of how ridiculous it was," he says, adding that the clothes nonetheless helped him feel confident under the bright studio lights. He has been allowed to keep his clothes, he says, and now has a good stock of suits to wear to family weddings.

It is uncertain whether there will be a second series, but it is not out of the question. Whatever happens with the streaming giant, Andrew will be out there, promoting Bakineering, STEM and also encouraging people to create their own interdisciplinary fusions with confidence.

"I want people just to run with it and use the inspiration as they like. If you want to be a mathematician who's a ballet dancer or an art teacher who climbs mountains or an engineering baker, find your own combo of what makes you happy…get creative with it.

"We're all unique so fewer silos, more fusions and that's where the fun starts to comes through," he says. ■

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