

Fueling Curiosity

How Formula 1 Racing Sparked an Educational Adventure

“Give a child a piece of paper and some crayons, and ask them to draw a car . . . they will surely make it red,” said Enzo Ferrari. But Ferrari was wrong about my son. When Noah

Federico Bastiani was just three years old and fell in love with

Formula 1 racing, the first car he drew wasn’t red; it was black. Yes, black, like the Mercedes cars of his heroes, Lewis Hamilton and Valtteri Bottas.

Perhaps these two drivers caught my son’s attention because Noah is half South African and Lewis is very popular in South Africa. Or maybe it was because Toto Wolff, the Mercedes AMG CEO, sent us a signed cap from Bottas during the pandemic. Or perhaps it’s simply because children are irresistibly drawn to



champions. Whatever the reason, a spark ignited in Noah — one that quickly grew into an overwhelming passion, developing day by day, completely spontaneously.

When the Pandemic Hit

Noah attended a Montessori preschool that focused on cosmic education, an approach that aims to give children a unified view of the world and foster a deep sense of wonder. This holistic vision connects every element of the universe. When the school closed due to the

pandemic lockdown, the teachers tried their best but the children were deeply affected. Keeping them in front of a screen for hours was almost impossible.

During those days, Noah, purely by chance, discovered the YouTube channel “F1 Dimenticata” developed by Andrea and Yuri, two Formula 1 enthusiasts who share the history and stories of Formula 1 racing. It was love at first sight for Noah. He began drawing cars from the past and asked me to read him books by Umberto Zapelloni, an Italian motorsport journalist who traces the history of Formula 1.

In just a short time, he had memorized all the championships and the victories of Jackie Stewart, Gilles Villeneuve, and Alberto Ascari. He then began following “P1 with Matt & Tommy” on YouTube with great passion. I started to wonder how I could turn this passion into something educational, in line with the Montessori style of learning.

Enhancing Noah's Skills Through His Motorsport Passion

• Memory

Sometimes, all you have to do is observe children; they already have all the answers, and you just need to ignite the right spark. One day, Noah invented a memory card game¹ using Formula 1 drivers. He cut out sheets of paper and listed teammates from specific seasons. He was trying to memorize all the drivers in Formula 1 history.

• Design

One day, Noah asked me to bring home some empty boxes he had seen outside a shop. I didn't understand why until I saw him using the cardboard to re-create and customize Charles Leclerc's racing helmet.² His manual skills improved as he used scissors, drew, and colored. Since every driver customizes their helmets, he started sharing his designs and pitching his ideas with Ferrari, McLaren, and Mercedes. Another day, he tried to replicate a real Formula 1 track³ in his room designing all the curves.

• Math

Mathematics became essential. One day, while we were

watching a Grand Prix together, Noah, who had just turned 5, started calculating how many laps were left in the race. He was doing subtraction. “Dad,” he said, “if Leclerc is half a second faster than Verstappen, he can catch up in eight laps.” Noah was using the information he had to answer the crucial question: How can Leclerc win this Grand Prix?

• Science

While observing races, Noah noticed that cars needed to warm up their tires. He wanted to know why, so we did an experiment.⁴ We warmed

up an eraser and observed how it stuck to paper. “Oh, I see, Dad,” Noah said. “The car needs to grip the track.” Another day, while drawing a car, he forgot to design the front wing and asked, “Why do cars have wings?” We began talking about aerodynamics and conducted some more experiments.

• Soft Skills

I'm not a Formula 1 expert, so I couldn't answer many of Noah's questions. I told him to prepare his questions and arrange interviews with Formula 1 experts. He took this



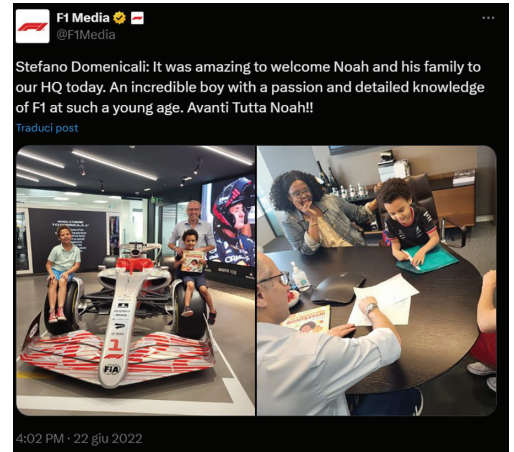
task seriously and started building confidence when talking to adults, a skill he had struggled with before.

The Instagram Channel

Noah's Instagram channel, @noahcooks_2015, initially dedicated to his culinary experiments, transformed into a space where his creativity met the world of Formula 1. His curiosity was inexhaustible. He realized that Formula 1 is more than a series of battles on

the track. It is a complex universe of technology and research. As his curiosity led him to deep exploration, he learned to simplify complex concepts in order to explain them to the whole family during dinner.

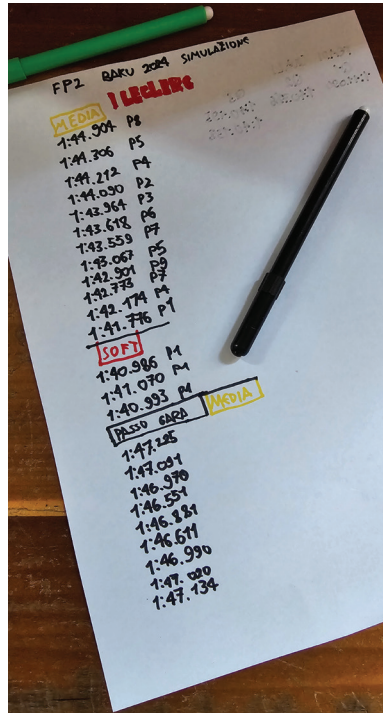
This gave birth to the idea of "Noah Explains F1," a project aimed at introducing young people to the technical side of Formula 1 through hands-on experiments. How does a wind tunnel work? What is blistering? What are flat spots? How does a tire blanket



function? Noah explains it all with surprising clarity.

Often, it's not enough to ignite the spark, you need to find the people who will fan the flames. Over the years, figures like Mario Isola from Pirelli, Carlo Vanzini from Sky Italy, and the Formula 1 driver Valtteri Bottas, who wanted to meet Noah in April 2021, have always encouraged him. Aston Martin opened the doors to its Silverstone factory to show Noah how a Formula 1 car is built, and Stefano Domenicali, CEO of Formula 1, welcomed Noah to the headquarters in London. Noah wanted to talk with him because he had ideas for improving the tracks!

Noah's Instagram channel has grown significantly, and we now receive messages from teenagers who, while not as fanatical about Formula 1 as Noah, appreciate his ability to explain complicated concepts, like the overcut and undercut, in just one minute. When Radio Phobia (www.radiophobia.net), a radio station in Reggio Emilia, Italy, asked Noah to host a Formula 1 program, I thought it might be too much for an 8-year-old. A radio program requires synthesis, preparation, and the ability to express ideas concisely. Noah accepted the challenge with enthusiasm, and



once again proved that when a child is driven by passion, the possibilities for personal growth are endless.

When a child has a deep passion and strong focus, the only way forward is to use that passion in an active, constructive way.

Noah's Instagram:

¹Noah's Memory Card Game: <https://bit.ly/3OxjI50>

²Noah's Leclerc Helmet: <https://bit.ly/4fRE19m>

³Noah's Formula 1 track: <https://bit.ly/3ViKTV1>

⁴Noah's eraser warming experiment: <https://bit.ly/4fVqwVW>

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Formula 1 Racing

- **Cars:** Formula 1 cars are single-seat, open-cockpit, open-wheel vehicles with large wheels, big front and rear wings, and a turbocharged engine behind the driver.
- **Races:** Formula 1 races are called Grands Prix and take place on closed roads or purpose-built circuits across multiple countries and continents. The 2024 season featured a record-breaking 24 races.
- **Drivers:** Drivers compete for the Formula 1 Drivers' Championship, while teams compete for the Formula 1 Constructors' Championship.
- **Teams:** Formula 1 teams can have up to 600 people, including designers, engineers, mechanics, and drivers.
- **Helmets:** Formula 1 drivers wear some of the strongest helmets in the world, designed to withstand crashes, fire, and extreme G forces.
- **Tires:** Formula 1 tires can reach temperatures of 120 degrees Celsius.
- **Engines:** A Formula 1 engine only lasts for five races.



- **Weight:** All participating cars must meet a minimum weight requirement, which is calculated with the driver in the vehicle.
- **Super License:** Drivers must have a super license to race in Formula 1, which includes passing written knowledge tests, having prior experience, and an FIA International Grade A license.
- **First Grand Prix:** The first Grand Prix was held in 1959 in Sebring.