

Humble but Gifted

A mathematics wizard enables poor students to join India's technological elite

By Rahul Kumar

Pankaj Kapadia, 20, is the son of a shopkeeper in the village of Nasriganj, deep in Bihar, the northern Indian state that is home to 90 million people, most of whom are poor and illiterate.

Kapadia is a chemical engineering student at the prestigious Indian Institute of Technology (IIT) in Delhi. When he completes his course, he will not only be Nasriganj's first college graduate, but he will also have a chance to join his country's technological elite.

Kapadia, like dozens of others, owes much of his success to being a member of a "Super 30" batch at the Ramanujan Academy in the state capital of Patna.

The academy, founded by mathematics wizard Anand Kumar in 2003, each year offers 30 gifted students free board and lodging, and an intensive 7-month coaching course to prepare them for the stiff entrance examinations of the IIT.

"Super 30 built tremendous self-confidence in us. After the coaching, we realized we could do it," says Kapadia. "Growing up in my village, I knew what an engineer was, but did not know how to become one."

Like Kapadia, most of Kumar's "graduates" get into one of the IITs across India. In 2008, the entire Super 30 group earned places in the IIT. In 2007 and 2006, 28 out of the 30 were admitted to the IIT. Gaining a place in the IIT is a transforming experience, opening the doors to becoming an engineer or management expert.

What makes the program more remarkable is that the students come from a state where many are also from low-caste backgrounds that can put them at a severe disadvantage in India. Alumni of a Super 30 batch who made it to the IIT include children of auto-rickshaw drivers, watch repairers, sidewalk vendors, landless farmers, and brick-kiln laborers.

Those who make the Super 30 group are selected from around 3,000 candidates after competitive examinations. Students must not only be academically gifted but also have the drive and resourcefulness to carry them through the focused training that includes highly interactive sessions in mathematics, physics, and chemistry.

Not surprisingly, Kumar is also from a modest background and was unable to take up a course at Cambridge University for financial reasons. He says he got the idea for Super 30 after observing that many well-to-do students leave India whereas poorer students tend to stay home.

A local deputy police chief, Abhyanand, who taught physics, helped Kumar in his work until last year. Kumar's brother, Pranav, helps run the program and their mother cooks for the students.

Bihar was once a center for learning and culture in ancient India, but now lags behind other states in human and economic indicators, with residents of the state sometimes encountering prejudice. Kumar offers his students an opportunity to overcome the barriers of poverty, caste, and discrimination.

Ironically, a man who has helped so many young people also has his share of enemies. Last year, he complained publicly that rival coaching schools had poached some of his successful students.

Kumar moves around with one or two armed policemen, keeps a dog at his gate, and has firearms for personal safety. "Extortionists and rival coaching center owners have made threatening phone calls," he explains.

His students also face challenges in Bihar, where the educational system is not very strong. Krishan Kumar, 52, a watch repairer with a tiny shop, can barely feed his family. His son Priyanshu joined a Super 30 batch and is now studying metals and metallurgy at the IIT in Kharagpur. Now Krishan and his wife Devi want their daughter Preeti Bharti to follow her brother to the IIT. She is attending coaching classes—though not with the Super 30—but Krishan fears sending her to evening classes for security reasons. Bihar is known as India's "Wild West" and for its caste-based killings.

Anand Kumar's success has bred many imitators; some teachers are coaching classes of several hundred students using microphones.

Kumar regrets, yet also understands, that many of his students leave Bihar. "None of the first batch of Super 30 students who graduated from the IIT is working in Patna. The state does not have enough opportunities to offer them," he says. "But at least they are all still in India." More importantly, they have gone beyond the boundary of poverty. ●

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