THE ELECTRIC NUDGERS

Niharika Kapoor | Nikhil George | Rajeeta Prasad

L'ORÉAL Sustainability Challenge FOR B-SCHOOLS

IIFT Delhi

The Problem

IIFT has more than a dozen classrooms, with each of them having a complex array of switches – making it very difficult for anyone to memorize each of their functions.

Many of these classrooms are left open at night so that students may study and do group assignments, but most people do not switch off unnecessary lights and fans when they leave the rooms. As a result, lights and fans are kept on the entire night.


The Big Idea

Nobel prize winning economist Richard Thaler proposed the design of 'nudges'. According to him, *"a nudge is any small feature in the environment that attracts our attention and influences the behaviour that we display."*

It's about making it easier for people to make better decisions. People can be "nudged" by arranging the choice architecture in a certain way, without taking away the individual's freedom of choice.
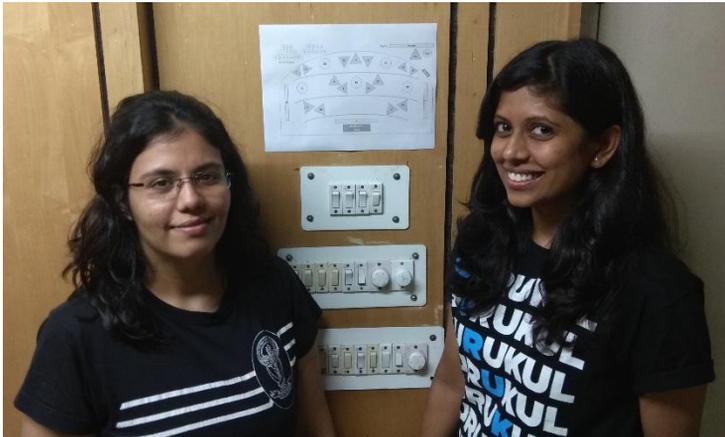
Example: Placing healthy foods in a school canteen at eye level while putting junk food in harder-to-reach places. Students aren't actually prevented from eating whatever they want, but arranging the food choices that way causes them to eat less junk food and more healthy food.

We want to reduce electricity consumption on our campus by designing a nudge. We designed a chart that mapped all the switches in a room to their functions, making it easier for people to use only the lights and fans that they needed.
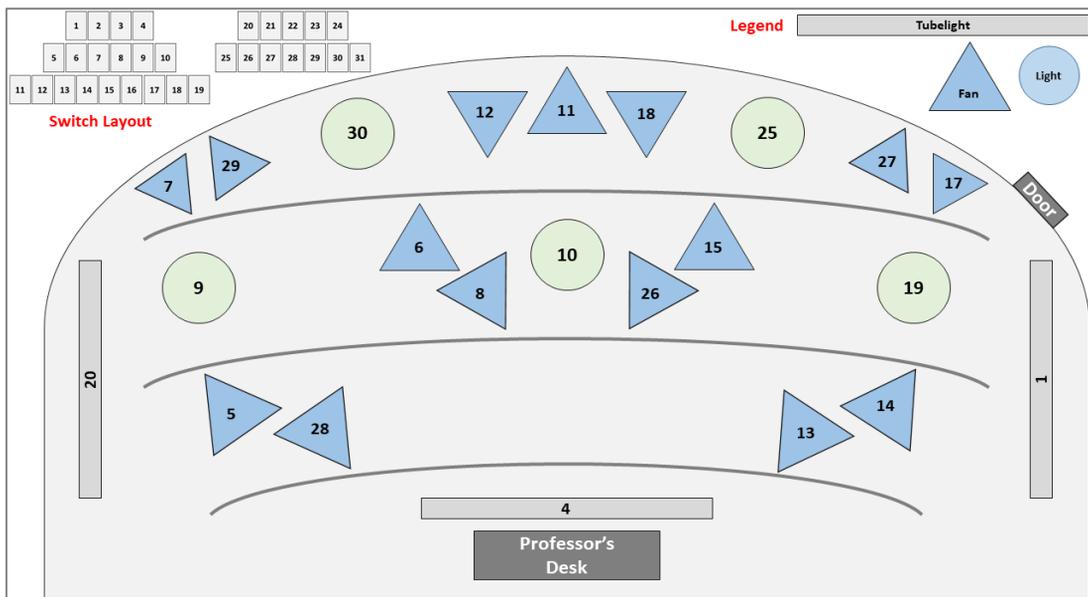
We stuck these charts above the switch boards in classrooms across our campus. We also placed a video camera in one of the classrooms and recorded peoples' reactions. (click to watch)

L'ORÉAL Sustainability Challenge

We pledge to reduce electricity consumption on campus by designing nudges (inspired by Richard Thaler) that make it easier to make decisions, such as switching off lights and fans when not in use

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As we had hoped for, the charts did significantly help in bringing down electricity consumption in the classrooms at night as people used electricity more judiciously.

Impact

The average classroom on campus has five ceiling fans, three tube lights and fifteen cluster lights (with each of having three CFL bulbs).

Electrical Appliance	Number Per Classroom	Average Power Rating	Total Power Rating
Ceiling Fan	5	75 watts	375 watts
Tube Light	3	40 watts	120 watts
CFL Bulbs	45	15 watts	675 watts

Total per classroom = **1200 watts approx.**

Assuming that all of them are left on for **8 hours** (between 7pm and 3am) in **all 10 classrooms** every night, it adds up to a yearly electricity consumption of around **35,000 kWh**.

Based on observations, we can safely assume that our idea can bring about **50% reduction in energy consumption, leading to annual savings of 17,500 kWh and ₹ 1,40,000!**

17,500 kWh of energy is equivalent to: (www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)

13,024 kilograms of Carbon Dioxide

Carbon offset by 338 tree seedlings grown for 10 years

6.5 metric tons of coal burnt

52,000 kilometres driven by the average passenger car