



TECHNOPUSH 2006

A DESIGN CHALLENGE FOR KIDS

The inaugural NRMA-Kids' Design Challenge TechnoPush event was held at Merrylands Park in Sydney's west on 19 June this year. It was a joint event staged by NRMA Motoring & Services and the Technology in Primary Schools Group (TIPS), in partnership with NSW Department of Education and Training, Curriculum K-12 Directorate and the Catholic Education Office, Sydney Archdiocese.

It was a hugely successful day with over 800 students from 31 schools putting their purpose-built pushcarts through their paces. TechnoPush involves children in designing and building a vehicle to meet safety and performance specifications. Along the way they learnt about movement, levers and energy principles, physical fitness and how to work in teams - all in a practical setting.

Pushcarts have provided many hours of enjoyment for children. A pushcart is a billy cart that is designed to be pushed by one person and steered by another seated in it. As with many products, science and technology have contributed to the evolution of the pushcart. For the TechnoPush classes built their pushcarts from all sorts of materials, from recycled wood to old iron board frames. They found wheels from lawn mowers and golf buggies, made steering mechanisms from bike handles and tested out what made the best brake.

The brief for schools in 2006 was to design and construct a pushcart that could participate in a sprint relay, negotiate an obstacle course and survive an endurance relay. Each class also designed their team appearance and developed a fitness program in preparation for the big event day. Best of all they had fun!

Throughout the event participating teachers were supported in a variety of ways, including a comprehensive implementation package, a briefing workshop, background information on technical aspects of the event and online contact with industry specialists and KDC teachers to assist with class activities.

NRMA Road Service Ambassadors and Young Engineers from Engineers Australia worked with the classes, providing input advice and scrutineering during the construction phase of the carts. NRMA provided breakdown service during the day of the event, demonstrating to the students one of the cornerstones of NRMA's business.

Given the outstanding success of the 2006 TechnoPush, it is intended to extend the event in 2007 to include high school students and include the building of layback bicycles as an extension of the pushcart design and build activity.

The TechnoPush promotes students' interest in Science and Technology and paves the way for students to continue to higher learning, perhaps even to study automotive engineering and participate in such events as the Society of Automotive Engineers Formula competition, in which University and TAFE students design, build and race a small track car using a motorcycle engine.

Should your school wish to participate in TechnoPush in 2007, please contact Jay Craig on 8222 2158 or at jay.craig@mynrma.com.au or Susan Harriman on 9886 7108 or susan.harriman@det.nsw.edu.au. This will enable you to receive details of the 2007 program.

KDC

