

## First step towards environmentally-friendly shoes

June 22 2006

A Northumbria University student has designed an environmentallyfriendly children's shoe that adapts to a child's differing needs in footwear.

The shoe uses fewer resources and components in its manufacture and, as such, lends itself more easily to recycling.

John Macdonald, who is in his final year of a Design for Industry course, used a black moulded flexible plastic as the basic structure. The shoe is then kept in a secure position by fitted, elastic straps.

John, originally of Bath but now living in Swindon Terrace in Heaton, said: "At the moment shoes are made out of as many as 40 different components and a variety of adhesives which means they can't be recycled.

"My design uses minimal separate components, some of which can be made locally. The shoe is quick to assemble and easy to take apart again which increases the possibilities of recycling."

To further aid recycling, John devised an incentive scheme for customers where they would be offered a discount on their next pair of shoes whenever they brought an old pair back to the shop. The returned shoes would then be correctly disposed of and recycled in ways which would benefit the manufacturer.



John was also keen that the shoe should fit in with the different activities and lifestyles of children.

"The plain black shoe would be used by children when they are at school but the straps can be reversed or customised to add colour for when kids are playing sports or if they are going to a party," he said.

"The construction of the shoe is lightweight and supportive, lending itself to active lifestyles which should be encouraged in children."

John has called his design the HOOP in reference to two loops at the top of the shoe which help stretch apart the shoe to allow the foot in. The shoe then snaps back and grips the foot. This was inspired by children from a youth group in Gateshead with whom John worked in researching his design.

John also worked with Clarks on the project and he has now been offered a work placement there to develop his design.

Source: Northumbria University

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