

PEBBLES at Rainbow Babies & Children's Hospital, Cleveland

Remarkable Robots a "lifeline" for Remote Children

CLEVELAND, OHIO - February 4, 2003. PEBBLES the telepresence robot to connect Rainbow patients to their classrooms. For some children, treatment for acute illness or injury can mean weeks, or even months in the hospital - apart from their family and classmates. Gradually, these students lose contact with what is going on in the classroom. Missed work piles up, often adding to the considerable stress caused by their medical conditions. Even after they return, their experience may make these children reluctant to return to school, and their classmates also may be confused by their mysterious absence.

The Providing Education By Bringing Learning Environments to Students (PEBBLES) Project uses two child-sized robots to connect a homebound or hospitalized child with their own classroom. The sick child gets a robot in his or her hospital room. The robot's head includes a monitor and camera.

At the child's school, a second robot sits at his or her desk and broadcasts real time audio, video and documents back to the hospital. A hand-held videogame style controller allows the child to rotate the robot's head to follow a teacher or to look around the room. A push of a button raises the robot's hand, enabling the sick child to ask or answer a question.

PEBBLES is the world's first robotic student. It represents the culmina-

tion of 5 years of research and development by Telbotics Inc. in cooperation with the assistive technologies departments at the University of Toronto and Ryerson University. The current version of PEBBLES was redesigned and manufactured in partnership with the IBM e-access department. Each robot is engineered with IBM technology, balancing outstanding quality with simplicity of operation.



Photo: Kristoff Sennrich

PEBBLES already serves as a bridge for hospitalized children in facilities across Canada including Toronto's Hospital for Sick Children and the Ronald McDonald House in Toronto. It has been launched in the United States at Yale-New Haven Children's Hospital, Miami Children's Hospital, Rainbow Babies and Children's Hospital, Chicago Memorial Children's Hospital and Hasbro Children's Hospital in Rhode Island.



Telbotics Inc., a Canadian private company, was founded in 1997. Telbotics specializes in the development of enhanced videoconference applications to connect people in more realistic, humanistic ways - described as telepresence. Telbotics has pioneered telepresence systems which uniquely combine videoconference and robotics to create a sense of presence as opposed to "appearance" evident in traditional, static videoconferencing systems.

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