The Lego Program
at a glance:

- Students in fourth grade through high school program LEGO ROBOLAB software and construct items using LEGO DACTA sets

- Students in pre-K classes build objects with LEGO DUPLO bricks

- West Virginia Instructional Goals and Objectives are Integrated into LEGO curricula at all age levels

- Local and international partnerships are promoted

- Students improve math, science, reading, computer, problem-solving, and technology skills

- Students explore future careers and practical applications that integrate transportation, robotics, computer programming, engineering and the Internet.

For more information, contact Linda Hamilton by e-mail at hamilton@marshall.edu, by telephone at (304) 696-3043 or visit ATI’s LEGO website at www.marshall.edu/lego.
Involvement, excitement and education are key factors in the LEGO program. As part of AT&T Technology Transfer initiatives, program director and Marshall University professor Linda Hamilton guides local students in grades pre-K through 12 in designing, building, programming and testing LEGO ROBOTICS vehicles for transportation systems and to explore traffic control and monitoring.

Students in grades pre-K through 3 use LEGO DUPLO bricks to construct vehicles and systems of roads, bridges, towers and other objects to create transportation systems. Students in grades 4 through 12 participate in hands-on training with LEGO Intelligent Transportation Systems (ITS) to create and operate AppaLEGO City. This high-tech model city, which is located at AT&T headquarters, contains buildings, roadways, bridges and a monorail. Using LEGO ROBOTICS, “Red Rover” software, light or sound sensors, and infrared towers, students program components of the city, which may be controlled from locations throughout the world via the Internet.

Students from several Cabell County schools and outreach workshops in Raleigh, Mercer, Kanawha, Fayette and McDowell counties have participated in LEGO programs, and students from Barboursville to Mexico have operated AppaLEGO CITY through the Internet.

Above: Students at Barboursville Middle School construct LEGO vehicles they will program using ROBOLAB software.

Above left: AppaLEGO City 2001 was created by local students who LEGO ROBOTICS summer workshops at AT&T headquarters.

Above: Via the Internet, students from Miller Elementary School and other local schools control components of AppaLEGO City at the Nick J. Rahall, II Appalachian Transportation Institute at Marshall University.