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TLC (Technology Literacy Curriculum) Development in
Lehigh Valley School Districts

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Abstract

Under the direction of Assistant Superintendent Dr. McAdams in the Allentown School District (ASD), the curriculum development focus for the 2004-2005 school year is to coordinate the technology curriculum at the middle school level. The focus is on incorporating technology units that employ engaging technologies such as mobile robotics. Such technologies involve problem-solving skills, use resources from other curriculum areas, and drive students to higher thinking skills.

Harrison-Morton Middle School's Technology Department is currently taking the lead in this initiative. The focus is on the integration of mobile robotics at Harrison-Morton Middle School as an example to the other middle schools in the Allentown School District as well as to Broughal Middle School in the Bethlehem Area School District. The mobile robots will be used to integrate material from the math and science curriculums, and engage the students in reasoning when there is not a clear-cut answer. They will be deployed and remotely controlled in a realistic Martian Landscape to be developed as part of this proposal. The ASD plans for all four middle schools in the district to use the new technology education curriculum by the second semester of the 2004-2005 school year. In turn, the success of the program at Harrison-Morton Middle School is important to the development of similar programs not only across the ASD but in neighboring districts such as the Bethlehem Area School District as well. As part of the NSF STEM outreach project, we have already begun using mobile robotics at Broughal Middle School in the Bethlehem Area School District. In addition, we have formed a cross-district technology education curriculum development team that involves teachers from both the Allentown and Bethlehem Area School Districts.