

**2008 NCTI *Technology in the Works* Abstract:
Efficacy of a Computer-Assisted Teaching Program
for Children with Autism in a School Setting**

To address the increasing need for solutions for serving children with Autism Spectrum Disorders (ASD) in the schools, it is important to consider options that are more accessible and affordable such as Computer-Assisted Instruction (CAI). However, it is even more essential that these solutions are effective and research is needed to address this issue. In this collaborative study with TeachTown, Los Angeles Unified School District, and California State University, Los Angeles, a CAI program which targets language, cognitive, academic, social, and life skills will be assessed in a large public school system. Fifty preschool and kindergarten children with ASD will participate with 25 children in a treatment group and 25 children in a control group. Children in the treatment group will receive 50-100 minutes per week of CAI and 50-100 minutes per week of supplementary off-computer activities designed to enhance generalization to the natural environment. The CAI and off-computer activities will be provided through *TeachTown: Basics*, which is currently being used in many schools across the United States, but which has not yet been tested in a randomized research study. In addition to the automatic data collection provided by the software, school staff will be asked to keep a daily record of their use of off-computer activities and students will be assessed using behavioral and standardized outcome measures. It is anticipated that the classrooms using the *TeachTown: Basics* program will demonstrate significantly higher rates of acquisition across learning areas and will also show more improvement in their spontaneous language and social interaction. It is also expected that children in the treatment group will exhibit less inappropriate behaviors following treatment than their peers in the control group. Following this study, it is also anticipated that teachers and parents involved in the treatment group will show higher satisfaction ratings with their child's program than those parents and teachers associated with the control group. The results of this research will help demonstrate to school districts the effectiveness and social validity of implementing CAI, and will help districts such as LAUSD secure funding for these types of programs by having data to demonstrate the effectiveness.