

1-1-2005

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Recommended Citation

G. Leroy, J. Huang, S. Chuang, M. Charlop-Christy, "Non-Verbal Communication with Autistic Children using Digital Libraries", IEEE Technical Committee on Digital Libraries Bulletin, Online.

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TCDL Bulletin
Current 2005
Volume 2 Issue 1

Non-Verbal Communication with Autistic Children using Digital Libraries

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Autism spectrum disorder (ASD) has become one of the most prevalent mental disorders over the last few years and its prevalence is still growing. The disorder is characterized by a wide variety of symptoms such as lack of social behavior, extreme withdrawal, and problems communicating. Because of the diversity in symptoms and the wide variety in severity for those, each autistic child has different needs and requires individualized therapy. This leads to long waiting lists for therapy.

By using information technology (IT), therapy can be provided to more children sooner. In the [Intelligent Systems Lab \(ISL\)](#), we use IT to augment behavioral therapy to improve communication skills. We are developing a digital library (DL) that helps young, non-verbal autistic children communicate.

This DL contains images and is available on a Pocket PC. Autistic children combine the images to form a message. Such communication with images has been used successfully with the paper-based Picture Exchange Communication System (PECS). However, a Pocket PC is lightweight and easy to carry around and less stigmatizing. It provides therapists and teachers with an efficient way to teach communication skills and get usage feedback. We have developed a prototype and are evaluating it with non-autistic message receivers, parents, therapists and teachers, and autistic children.



For a larger view of the Figure, click [here](#).

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Some or all of these materials were previously published in the *Proceedings of the 5th
ACM/IEEE-CS Joint Conference on Digital libraries*, ACM 1-58113-876-8/05/0006.