



Mission Statement: CSAL is committed to understanding the reading-related characteristics that are critical to helping adult learners reach their reading goals and to developing instructional approaches that are tailored to adult learners' needs and interests.

The **Center for the Study of Adult Literacy (CSAL)** was a Research & Development (R&D) Center funded through a cooperative agreement (R305C120001) with the **National Center of Education Research (NCER)** in the Institute of Education Sciences (IES) at the U.S. Department of Education. This project started in September 2012 with the goal of conducting research to improve reading development for adults reading at the 3rd to 8th grade levels and closed in 2022.

Sample of Center Activities

Explore the underlying cognitive and motivational factors that help or impede adult students reading at the 3rd to 8th grade level: Using a wide array of reading, motivation, and cognitive assessments, CSAL explored the underlying characteristics of adult students and collected evidence about the appropriateness of assessments for this population.

Create a repository of age-appropriate reading materials: CSAL collected authentic reading materials, many of which are in the public domain or are open source.

Develop a reading intervention that is tailored to the needs of adult learners: CSAL developed a multiple component blended reading program that can be implemented by adult education teachers for individual or classroom instruction.

Conduct feasibility and pilot tests of the intervention to determine its promise: CSAL conducted feasibility and pilot studies with adults in authentic adult education settings in Atlanta and Toronto. These studies tested the intervention's promise and feasibility of use.

Participating Researchers and Institutions

CSAL was staffed by researchers with expertise in adult and child literacy, education technology, and educational measurement and was further supported by the participation of adult education students and practitioners at all stages.

Principal Investigator:

Dr. Daphne Greenberg, Georgia State University

Co-Principal Investigators:

Dr. Maureen Lovett, University of Toronto

Dr. Art Graesser, University of Memphis

Dr. Jan Frijters, Brock University

Dr. Lee Branum-Martin, Georgia State University

Why have an adult literacy R&D center?

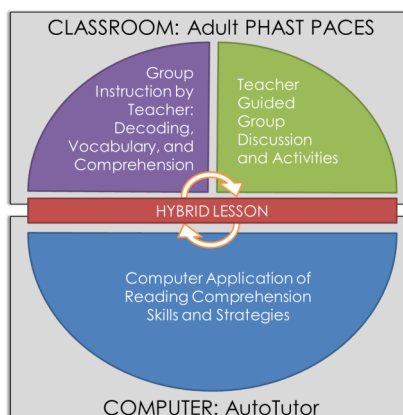
Roughly 20% of U.S. adults have foundational reading skill gaps (NCES, [PIAAC National Results](#)). They deserve to have research-based curricula, technologies, and assessments designed to address their specific needs or interests.

Features of the Curriculum

CSAL adapted and refined a curriculum first developed for and evaluated with adolescents reading at the same level as the target adult students. The current curriculum uses a hybrid model. In this approach, teachers lead small group instruction and discussions, and students get supplemental, online reading practice using an interactive, animated reading tutor.

Guiding Principles

1. Make instruction relevant to students' goals
2. Design and use materials of interest to them
3. Address gaps in foundational skills, strategies, and knowledge
4. Structure learning tasks to generate motivation, engagement, and persistence
5. Celebrate tangible successes and help learners acquire effective strategies they can use on their own



Examples of Skills Addressed

Phonological decoding
Vocabulary
Morphology
Comprehension
Text and genre awareness

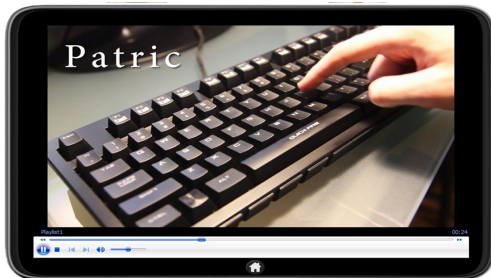
Features of AutoTutor

AutoTutor is an interactive, online program that allows students to practice comprehension. As part of the hybrid lesson plan, AutoTutor allows students to work at their own pace, repeat material, and learn additional skills (e.g., getting accustomed to the keyboard). The system also captures data on student use, thus allowing for customized feedback on progress for student and teachers.

Watch an overview of the interface on YouTube: <https://youtu.be/VNylldrcGzY>

Features

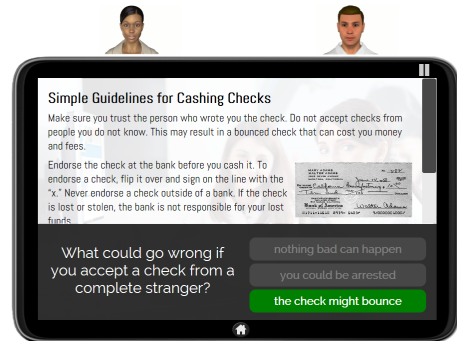
- ◇ Simple interface
- ◇ Trialogs: human student interacting with conversational agents (tutor and student)
- ◇ Multimedia presentations
- ◇ Student input: clicks, yes/no, multiple choice, typed natural language



AutoTutor includes videos to help students develop computer literacy and reading skills.

Functions of Conversational Agents

- ◇ Help when initiated by the user
- ◇ Navigational guide
- ◇ Modeling action, thought, and social interaction
- ◇ Adaptive, intelligent conversational dialog
- ◇ Different roles: peer and tutor



AutoTutor uses examples from real-world experiences to help students develop reading comprehension.

Resources on the Internet

CSAL website: <http://csal.gsu.edu/>

Resources for practitioners and policymakers: <https://sites.gsu.edu/csdl/general-adult-literacy-websites/>

Archived workshops and presentations: <https://sites.gsu.edu/csdl/events/>

Practitioner-friendly research descriptions: <https://sites.gsu.edu/csdl/additional-studies/>

“Do We Care About Us?”: Dr. Daphne Greenberg talks about the importance of adult literacy in her TedX Peachtree talk: <http://www.youtube.com/watch?v=oGad2PKUhbE> see also <http://tedxpeachtree.com/2013-speaker-spotlight-daphne-greenberg/>

Related IES Grants

Projects that led to CSAL: Coh-Metrix: Automated Cohesion and Coherence Scores to Predict Text Readability and Facilitate Comprehension (R305G020018), An Implementation of Vicarious Learning with Deep-Level Reasoning Questions in Middle School and High School Classrooms (R305H050169), Multiple-Component Remediation for Struggling Middle School Readers (R324G060005), Acquiring Research Investigative and Evaluative Skills (ARIES) for Scientific Inquiry (R305B070349), The Writing Pal: An Intelligent Tutoring System that Provides Interactive Writing Strategy Training (R305A080589), Guru: A Computer Tutor that Models Expert Human Tutors (R305A080594), Applications of Intelligent Tutoring Systems (ITS) to Improve the Skill Levels of Students with Deficiencies in Mathematics (R305A090528), DeepTutor: An Intelligent Tutoring System Based on Deep Language and Discourse Processing and Advanced Tutoring Strategies (R305A100875)

Projects that CSAL led to: Developing and Validating Web-administered, Reading for Understanding Assessments for Adult Education (R305A190522), Developing and Implementing a Technology-Based Reading Comprehension Instruction System for Adult Literacy Students (R305A200413), GSU Postdoctoral Training on Adult Literacy: G-PAL (R305B200007)

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Funder Information: IES is the research arm of the U.S. Department of Education. Its mission is to provide rigorous and relevant evidence on which to ground education practice and policy and to share this information broadly. The **National Center for Education Research (NCER)** in IES supports research to addresses education needs, from early childhood to postsecondary and adult education.