U.S. DEPARTMENT OF EDUCATION

Institute of Education Sciences



http://ies.ed.gov



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)** is 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 5-year 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.

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 will explore the underlying characteristics of adult students and will collect evidence about the appropriateness of assessments for this population.

Create a repository of age-appropriate reading materials: CSAL is collecting 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 is developing 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:** During its final years, CSAL will conduct feasibility and pilot studies with adults in authentic adult education settings in Atlanta and Toronto. These studies will test the intervention's promise and feasibility of use.

Participating Researchers and Institutions

CSAL is staffed by researchers with expertise in adult and child literacy, education technology, and educational measurement and is 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?

Many of the assessments used to evaluate the skills of adults reading at low levels are not developed for them.

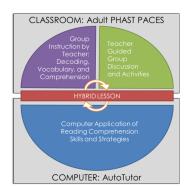
Similarly, many curricula and reading materials these students encounter are not designed to address their specific needs or interests.

Features of the Curriculum

CSAL is adapting and refining 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.

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
- Adaptive to student performance



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
- O Different roles: peer and tutor



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

On the Web

CSAL Website: http://csal.gsu.edu/

IES/NCER Project Abstract: http://ies.ed.gov/funding/grantsearch/details.asp?ID=1343

YouTube Videos: CSAL posts examples of AutoTutor lessons on YouTube, as they are being refined. Below, there are several videos depicting the user experience in the interface. Included in this sample are an introduction to the system and clips of interactions in lessons that are currently under development.

Overview of the Interface https://youtu.be/IZ6iEsq6VFQ Lesson 8: Clarifying Pronouns with Replace and Check https://youtu.be/YkYrbBU-Bvw Lesson 11: Review Quiz https://youtu.be/rtO20VpFAFg Lesson 23: Compare and Contrast Texts https://youtu.be/mZIVMItlywI

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

Funder Information

The **Institute of Education Sciences (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)** within IES supports research that addresses education needs, from early childhood to postsecondary and adult education.

Related IES Projects

CSAL is the culmination of years of research and various projects, including eight IES-funded projects: R305G020018, R305H050169, R305B070349, R305A100875, R305A080589, R305A080594, R305A090528, and R324G060005.