

STUDENT BENEFITS

There are many reasons undergraduate students should get involved with research. Here are just a few benefits:

- Enhances student learning through mentoring relationships with faculty
- Increases retention and graduation in academic programs
- Increases enrollment in graduate education and provides effective career preparation
- Develops critical thinking, creativity, problem solving, and intellectual independence
- Develops an understanding of research methodology
- Promotes an innovation-oriented culture

Council on Undergraduate Research: Featured Undergraduate Research Stories

ON CAMPUS RESOURCES

Check with each [College/School](#) for Research Symposium events and programming.

- [College of Engineering: Research Centers, Labs and Groups](#)
- [College of Nursing and Health Innovation: Research](#)
- [Division of Enterprise Development \(Certifications\)](#)
- [Heracleia Human-Centered Computing Lab](#)
- [LINK Research Lab](#)
- [Lockheed Martin Career Development Center](#)
- [Innovative Database and Information Systems Research Laboratory](#)
- [University of Texas at Arlington Research Institute \(UTARI\) - Student Internships Available](#)

HONORS COLLEGE RESEARCH

Each summer, the Honors College selects eligible Honors College students for Undergraduate Research Assistantships (URAs) various disciplines. The students may contribute to ongoing faculty research under the direction of a full-time faculty member at UT Arlington or submit his or her own independent research proposal for approval and mentoring by a full-time faculty member. The URA is designed to provide students with paid hands-on research experience that will provide a foundation for their senior project and for advanced study. Students participating in the 11-week summer program receive a \$3,000 stipend.

ENGAGE MENTORING PROGRAM

The IM Program will provide doctoral and doctoral-bound students who have completed 30 hours of graduate study an opportunity to gain teaching and mentoring experience by serving as a research mentor to a UT Arlington undergraduate. The program is open to all junior-senior level undergraduate students but minority and underrepresented and first generation undergraduates are particularly encouraged to participate. Graduate students will receive a \$400 stipend during the term in which they participate in the project. Undergraduates will receive a scholarship for 3 semester credit hours of independent study in the term in which they participate in the project.

MCNAIR SCHOLARS PROGRAM

The McNair Scholars Program is a federal TRIO program funded by the [U.S. Department of Education](#). It helps to prepare undergraduates from first-generation/low-income or underrepresented backgrounds to pursue graduate study leading to the PhD. It is open to all disciplines but especially encourages STEM majors to participate. A summer undergraduate research internship for rising seniors (with a \$3,000 stipend and scholarship for 3 credit hours of independent study related to the project) is a key component of the program.

Further information on eligibility and how to enroll may be obtained by visiting the McNair [website](#) or by contacting their office at 817-272-3715, or mcnair@uta.edu.

TUTORING & SI

University Tutorial & Supplemental Instruction provides academic support services for a variety of classes. Supplemental Instruction, or SI, is a free service that helps students work in groups to understand class concepts. Tutoring helps students develop and grow strong study habits by working one-on-one with a tutor. eTutoring provides free online tutoring, including writing assistance.

GUIDE TO CREATING RESEARCH POSTERS & UTA RESOURCES

UTA IDENTITY: LOGO, COLORS, & FONTS

UTA LIBRARY POSTER PRINTING SERVICES

Please [contact OUR](#) to borrow an easel.

Better Posters: Blog

A great showcase & reflection of the dos and don'ts of research posters.

A research poster is a visual communication tool that allows you to present your research in a clear, concise, graphic format. It attracts attention, conveys information clearly, and initiates conversations, and can represent any stage of the research process. Researchers often create posters before the completion of the research project in order to invite feedback or collaboration. Research posters are common practice when showcasing research at conferences, symposia, and other events.

In general, the bullet points below identifies the visual elements needed on research posters to communicate information clearly and quickly with appropriate visual cues.

- Lots of white space
- Elements that are aligned, not too close together and are evenly spaced
- Limited use of color
- Judicious use of features to differentiate sections, such as
 - Different font
 - Bolding
 - Size
 - A bar, line or use of color at the section header
- Attractive, easy-to-read fonts
 - Good ones include Helvetica, Times New Roman, Trebuchet, Century Gothic
 - Sans serif fonts (e.g. Helvetica) usually work a little better than serif fonts (e.g. Cambria)
- Minimal use of outlines, boxes, color backgrounds, gradients
- Lots of photos and figures

Templates and Examples

Title of Research Project (simple, no jargon)

Your Name, Department/College, Email Address



Background

Provide background and context for your research. Briefly introduce your audience to the topic of study. You can discuss other published, scholarly work on the topic if:

- It makes a case for the necessity of your research
- It explains how your research contributes to existing knowledge

Methods and Materials

Discuss the methods and materials you used to investigate your research question. Include (if applicable):

- Samples/measures used
- Research tools and/or equipment
- Manipulations, correlations, comparisons of interest
- Strengths and limitations of methodology



Description/explanation of graphics: Make sure to provide titles and descriptions of any visual aids you use.

Research Questions

Provide a clear statement of the problem(s) you are trying to solve or the issue(s) you investigated.



Graphics/Visual Aids

Description/explanation of graphics: Make sure to provide titles and descriptions of any visual aids you use.

Results

Discuss and analyze the research results

- Explain outcomes or findings in accessible terms.
- You may express your results quantitatively or qualitatively.
- If your research is in progress, report your preliminary results, findings, or initial trends.

Conclusion or Discussion

Conclusion/Discussion:

- Explain the implications of your findings. Think about long-term significance or impact of your work.

Future Directions:

- Offer unanswered questions for future research. Note how the project may evolve from here.

Acknowledgments

Thank those who provided any guidance, support, or funding for your research.

References

Include citations for any sources you used on your poster, including visuals.



COLLEGE OF NURSING
AND HEALTH INNOVATION

Title of Research Project: simple, no jargon

Your Name, Department/College, Email Address

Background

Provide background and context for your research. Briefly introduce your audience to the topic of study. You can discuss other published, scholarly work on the topic if:

- It makes a case for the necessity of your research
- It explains how your research contributes to existing knowledge

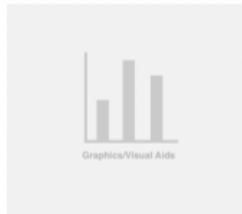
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Methods and Materials

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Graphics/Visual Aids

Description/explanation of graphics: Make sure to provide titles and descriptions of any visual aids you use.



Description/explanation of graphics: Make sure to provide titles and descriptions of any visual aids you use.

Results

Discuss and analyze the results of your research.

- Explain outcomes or findings in accessible terms.
- You may express your results quantitatively or qualitatively.
- If your research is in progress, report your preliminary results, findings, or initial trends.

Conclusion or Discussion

Conclusion/Discussion:

- Explain the broader implications of your findings. Think about potential long-term significance or impact of your work. Make it relevant to your audience.

Future Directions:

- Offer unanswered questions for future research.
- Note how the project may evolve from here.

Acknowledgments

Thank those who provided any guidance, support, or funding for your research.

References

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Assessing and Treating Speech Disorders in Children with Autism Spectrum Disorder (ASD)

Name(s), Department/College, Email Address



Background

According to the Center for Disease Control and Prevention (CDC), "Autism Spectrum Disorders (ASD) are a group of developmental disabilities that can cause significant social, communication, and behavioral challenges." The CDC recently announced that 1 out of every 68 children and 1 out of every 42 boys has ASD.

Research Questions

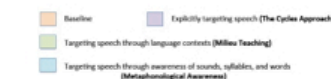
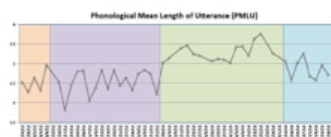
This study compares the effects of three different approaches to intervention for treating SD in children with ASD in the following order:

- Explicitly targeting speech (*The Cycles Approach*)
- Targeting speech through language contexts (*Milieu Teaching*)
- Help the child build an awareness of phonological skills (*Metaphonological Awareness*)

Methods and Materials

This study uses a single subject experimental design: a combination of multiple baseline across participants and alternating treatments. Speech sample data will be collected and broadly transcribed using the International Phonetic Alphabet after each speech therapy session. Analysis of data will be based on calculations of:

- Percent Consonants Correct – Revised (PCC-R)
- Phonological Mean Length of Utterance (PMLU)
- Word Complexity Measure (WCM)



PCC-R, WCM, and PMLU scores show modest improvements when the Cycles Approach was implemented, significant improvements when Milieu Teaching was implemented, and significant regression when Metaphonological Awareness was implemented.

Results

- Modest improvements seen in Cycles compared to Baseline
- Significant improvements were evident in Language context condition compared to Cycles
- Significant regression in phonological skills in Meta-awareness condition

Conclusion

- Supports previous results by Koegel et al. (1998) suggesting that a natural environment/play is best
- Milieu seems most efficacious: clear effect and regression when this condition started and ended.
- Never expected scores to go down once they went up. Therefore, there is concern about the generalization of increased skills.
- Traits of autism is a topic of interest.
- Scores can be vulnerable to topic variations day by day. More participants are needed.

Acknowledgments

- Funding for advanced RAs comes from the Texas Speech and Hearing Foundation.
- Thank you to Dr. Franco and Dr. Davis for mentoring me throughout this project. Thank you to all the undergraduate research assistants helping with this study.

Additional Resources

Open Textbook Library

American Mathematical Society Research Experiences (Various Institutions)

Applicants should note that most application deadlines fall in February - March. Here is an article by Frank Morgan on [what makes a good REU proposal](#). Most of the REU programs on this page handle their applications through the AMS service [MathPrograms.org](#).

Collin College Undergraduate Interdisciplinary Student Research Conference

Showcase your research (papers, reports, experiments, panels, posters, performances, etc.) to colleagues and fellow students in a professional, yet low-key environment with the opportunity to win awards or scholarship.

Department of Defense Summer Fellowships

To ensure the robust supply of scientists and engineers to meet the DoD's future science and technology needs, the ORISE program places individuals from the academic community (students, recent graduates, and faculty) in DoD research projects. On this site, you will find information about the many research opportunities that are available at the DoD through the ORISE program.

Department of Energy Internships

- [Science Undergraduate Laboratory Internships \(SULI\)](#)
- [Workforce Development for Teachers and Scientists \(WDTs\)](#)
- [Community College Internships \(CCI\)](#)

LAKES Research Experience for Undergraduates (REU)

Students who participate in LAKES will train under research mentors in biology, sociology, economics, anthropology, mathematics, geology, or communications.

National Science Foundation (NSF) REU Database

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU

projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. Undergraduate student participants in either REU Sites or REU Supplements must be U.S. citizens, U.S. nationals, or permanent residents of the United States. Students do not apply to NSF to participate in REU activities. Students apply directly to REU Sites or to NSF-funded investigators who receive REU Supplements. To identify appropriate REU Sites, students should consult the directory of [active REU Sites](#).

REU Experience for Undergraduates 2018 (Materials for Sustainability in Energy and Manufacturing)

The Cullen College of Engineering (CCoE) at the University of Houston will host a Research Experiences for Undergraduates (REU) program in the summer of 2018. The program is designed to inspire bright and motivated undergraduates to pursue graduate education and careers in science and engineering research.