The Division for Learning Disabilities (DLD) hosts an annual student poster session and reception at the Council for Exceptional Children (CEC) conference to highlight student research. Students are welcome to submit proposals about their research on various topics of learning disabilities (LD). Posters often range from unpublished mini literature reviews to results of randomized control trials. Members of the committee conduct blind peer review of the proposals and provide students feedback on submissions. For the 2018 CEC conference, ten proposals were accepted and presented. The poster session is not only an opportunity for students to highlight their research, but is also an opportunity for students to meet and interact with other students and researchers who specialize in improving outcomes for students with LD.

In 2018, Kristi Baker, Doctoral student at Southern Methodist University, was responsible for organizing the blind peer review of these proposals and ensuring the event was the success.

The following pages highlight the work of our student presenters from the DLD Student Poster Session.

continued on page 2
The Effects of Social Stories and a Token Economy on Decreasing Inappropriate Peer Interactions with a Middle School Student

Presented By Jacie White, Cynthia Caniglia, T. F. McLaughlin, Gonzaga University and LeAnn Bianco, Central Valley School District

One of the many challenges that children with learning disabilities (LD) experience, apart from academics, is severe deficits in the areas of social skills and peer relations. The learning of social skills and appropriate ways to interact with peers are crucial for school-aged children with learning disabilities. Without these skills, it can be difficult for these children to maintain meaningful relationships as well as interact with peers in the classroom. The purpose of this study was to decrease inappropriate peer interactions in a middle school student with learning disabilities using simultaneous intervention delivery of social stories and a token economy. From previous studies, the use of social stories and token economies have both been shown to decrease inappropriate behaviors and increase appropriate behavior. Based on these studies, it was hypothesized that implementation of a token economy combined with social stories would be successful at decreasing inappropriate peer interactions. The participant was a 13-year-old boy with LD enrolled in a middle school in the Pacific Northwest. The researcher used a multiple baseline across settings design and implemented the two interventions simultaneously. The researcher found that the simultaneous use of social stories and a token economy was successful in decreasing inappropriate peer interactions in a middle school student with learning disabilities.

DBI-TLC: Findings from a Descriptive Analysis

Presented By E. N. Mason, R. A. Smith & J. Simpson

Teachers are often unprepared to provide individualized intensive intervention (Lemons, A1 Otaiba, Conway, & Mellado De La Cruz, 2016). Data-based instruction (DBI) is a systematic approach to assessment and intervention that relies on evidence-based instruction (Fuchs, Fuchs, & Stecker, 2010). DBI, coupled with high-quality professional development and on-going coaching can result in improved outcomes for teachers and has promising outcomes for students (Lembke et al., 2018).

As a follow up to a larger pilot study (Lembke et al., 2018), this descriptive case study examined the effects of a professional development model, DBI-TLC, specifically:

- How does the weekly administration of a curriculum based measure (CBM) in writing influence students’ growth in correct words written over time?
- Does the use of daily text message prompts result in teachers recording intervention dosage?

This study took place in a mid-sized, Midwestern, school district. Participants were students in the 1st through 4th grades (n = 13) who were receiving special education services through the school district and were identified by special education teachers as struggling writers. Teachers in this study (n = 4) were certified special educators and had a range of 3 to 18 years of special education teaching experience (M = 11.4).

A sentence-level CBM was administered weekly to all students, regardless of whether or not students were receiving writing instruction for sentence-level skills. Although the majority (n = 9) of students were instructed at the word-level, all student participants increased their correct word sequences from pre- to post-test on the sentence-level measure.

All teachers in this study were asked to track daily dosage of writing instruction and intervention for the duration of this study (22 weeks). To support this dosage tracking, teachers were sent daily text message prompts via the Remind application. While most teachers struggled to consistently report dosage (M = 4.67 weeks), one teacher was able to record dosage for every student in her class, every week. This allowed us to analyze the number of instructional minutes received at the student level and compare that to achievement within the teacher’s class. The student who received the fewest word-level instructional minutes in this class was the only student whose word-level CBM score decreased between pre- and post-test. Furthermore, this was the only student across all teachers to decrease in performance.

continued on page 3
The purpose of the presentation was to describe technical features of vocabulary-matching measures used in a special education course, as well as preservice teachers' satisfaction with vocabulary activities to support their learning about progress monitoring. The research questions included: (a) Are vocabulary-matching measures used in an introductory course on special education reliable and valid?, and (b) How do preservice teachers rate their satisfaction with using vocabulary-matching progress measures across the semester?

Research Methods

The study was conducted across a 15-week semester in three sections of an introductory-level special education course. Participants included 114 undergraduates either majoring or minoring in education. Every other week, participants took a 4-minute, 20-item vocabulary-matching measure that covered critical terms addressed in the textbook (Hallahan, Kauffman, & Pullen, 2015). At pre- and posttest, participants took a 74-item, multiple-choice vocabulary assessment. Participants received scores on their previous vocabulary measure and graphed their progress during weeks in which a vocabulary probe was not administered. At the end of the semester, a cumulative, 70-item, multiple-choice final exam covering knowledge across the course was administered. Participants completed a questionnaire in which they rated their satisfaction with taking the vocabulary measures across the course and the contribution of the vocabulary activities to their knowledge.

Data Analysis and Results

Pearson correlations were calculated to examine the validity of the measures as indicators of performance. Results for internal consistency demonstrated evidence of moderate reliability ($r = .45 - .75$). Correlations between the vocabulary-matching measures and the vocabulary multiple-choice vocabulary assessment, and multiple-choice final exam demonstrated moderate concurrent validity ($r = .47 - .58$) and low-to-moderate predictive validity ($r = .28 - .49$). Student feedback indicated that the use of vocabulary-matching probes helped them to better understand progress monitoring, as well as their performance across the course.

Conclusion

The use of vocabulary-matching measures with preservice teachers may be a practical way to provide hands-on experience with progress monitoring probes in
content areas. Activities may be used to illustrate principles of progress monitoring, and graphed results provide feedback to individual students about progress in the course. Further investigation into the use of vocabulary-matching measures for special education vocabulary is needed to establish validity and reliability of measures.

References


Mathematics Performance of At-Risk First Graders with Limited English Proficiency

Presented By BrittanyLee Martin

While developing their English language skills, students with limited English proficiency (LEP) tend to rely heavily on their knowledge of algorithms to complete basic computations (Lee & Jung, 2004). Although adequate computation is foundational for success with higher-order math problems, computational skill alone is not sufficient for advanced tasks such as word-problem solving (Fuchs, Fuchs, Compton, Hamlett, & Wang, 2015). This is not surprising considering word-problem solving requires text processing to decipher the problem situation and an interaction between language comprehension processes and problem-solving strategies (Fuchs et al., 2015). Many studies have demonstrated the cognitive abilities underlying word problem solving and calculation skills differ; however, few studies have examined the extent of these differences specifically in students with limited English proficiency.

The purpose of this study was to explore the interactions between a student’s LEP status and risk status on two early mathematical skills – computation and word-problem solving. To answer this question, we examined pre- and posttest data from the participants in the control groups from the first two cohorts of an ongoing research project. Participants were 260 first-grade students from a southeastern Metropolitan school district. Students were stratified by risk status (at-risk or not at-risk for math difficulty) based on performance on screening assessments at the start of first grade. Students were then assessed in the fall of first grade and again in the spring on basic computation skills (addition and subtraction fluency with answers from 0 to 18) and word problem solving abilities. The authors then examined the performance of both AR and NAR students and examined how LEP status moderated this relationship.

Two-way between-group analysis of variance (ANOVAs) were conducted to assess the impact of risk status and LEP status on computation and word-problem solving performance. On pretest computation measures, the interaction between language status and risk status was not significant; however, on the pretest word problem solving measure the interaction between language and risk status was significant. Post-hoc analysis found a significant difference in scores between LEP and non-LEP students who were NAR. On both the computation and word-problem solving posttest measures, the interaction between language and risk status were not significant.

On pretest computation and word-problem solving measures, LEP students and native English-speaking students who were considered AR performed comparably on both computation and word problem solving measures. However, throughout the course of the school year LEP students struggled to keep up with their peers in both areas, as demonstrated by a .4 increase in effect size on computation measures and a .35 increase in effect size on word-problem solving measures. For students who were considered NAR, a similar trend appeared for computation measures, with students performing comparably at pretest. On word-problem solving measures, the effect size between LEP and non-LEP students was significantly large at pretest, $d = 1.0$. At posttest, this effect size had decreased, $d = .9$.

References


2017-2018
It has been another busy year in the life of DLD!

The 2017-2018 academic year was marked by several important events for DLD including transitions and new members for the DLD Executive Board, conference attendance in Maryland and Florida, ongoing collaborations with organizations interested in students with specific learning disabilities, awards distinguishing several of our members, and planning for future endeavors.

Leadership Transitions

New Officers began their terms on the DLD Executive Board on July 1, 2017. Stephanie Al Otaiba is now DLD President with Linda Mason now serving as the past-President to replace Laurie de Bettencourt. Jeannie Wanzek is now the President-elect leaving her position to newly elected Vice President Kristin Sayeski. Finally, Peggy Weiss was re-elected Treasurer and Michael Faggella-Luby remains for his second year as Secretary.

Additionally, the Executive Board welcomed Jessica Wery as the new Chair of the Professional Development, Standards, and Ethics Committee, and Emily Solari as the new Membership Chair replacing Devin Kearns during the year. They join the current committee chairs, William (Bill) Therrien (Publications), David Bateman (Policy), Bryan Cook (Research), and Diane Rodriguez (Cultural and Linguistic Diversity). Kristi Baker was the new Student Representative succeeding Carlos Lavin.

The team at DLD also includes Nancy Mamlin as the interim Executive Director, as well as Sarah Watt and Shaqwana Freeman-Green as co-editors of New Times for DLD newsletter. Linda Mason is the editor of DLD’s peer-reviewed journal LDR&P. Additionally, LDR&P now has its own App live and available for DLD members. For more see: https://apps.to.re/us/MawDab.i

Fall 2017: Collaboration in Baltimore, MD

The DLD board conducted two formal meetings this year to fulfill the DLD mission of education, advocacy, and outreach. For the second straight year, the Executive Board collaborated with the Council for Learning Disabilities (CLD) for a fall conference, this year hosted in Baltimore. Thanks to the many DLD members who joined us for presentations, fellowship, and fun!

Winter 2018: CEC International Conference in Tampa

DLD members escaped the cold to attend the February meeting of CEC in Florida. The new timing of CEC, no longer in April, brings a fresh opportunity for DLD members to connect and share ideas prior to the school testing season.

Each year, DLD presents a Showcase session to highlight research-based practices in the field of learning disabilities. This year’s session entitled Something I Can Use Tomorrow: A Classroom Practice, A Resource, and Identification of Students with SLD involved a collaboration of DLD members Miriam Ortiz (SMU), Kristi Baker (SMU), DLD President Stephanie Al Otaiba (SMU) and Michael Faggella-Luby (TCU) in collaboration with Devin Kearns (UCONN) and Bill Therrien (UVA). A special thanks to the DLD members who attended!

The DLD Annual Business meeting and Reception was held for members on Thursday evening. This year those who joined us received a white DLD embossed water bottle or a swiveling cell-phone holder! The business meeting is always a wonderful chance to honor the hard work of members across the country. During the business meeting the following awards were presented:

- **Janette Fleischner Award** presented to Dr. Mary Brownell (University of Florida)
- **Outstanding Educator Award** presented to Cecelia Hampton of Metro Nashville Public Schools, TN
- **Marva Collins Award** presented to Ms. Jocelyn Muñoz (Miami Public Schools)
- **Sam Kirk Award** was presented to two teams of researchers. First, The best research article was awarded to Christine A. Espin, Miya Miura Wayman, Stanley L. Deno, Kristen L. McMaster, and Mark de Rooij for their paper on data-based decision making related to CBM graphs by teachers. Second, the best practice article was awarded to Margaret E. King-Sears, Anya S. Evmenova and Todd M. Johnson for their work on using technology for accessible chemistry homework for secondary students with SLD.
- **John Lloyd Outstanding Dissertation Award** presented to Abigail Allen, PhD

continued on page 6
After the Annual Business meeting about 150 conference attendees joined us for the DLD reception. Student representative Kristi Baker helped organize research poster presentations by 9 graduate students for reception attendees to enjoy.

**Moving Forward**

The DLD Board is actively working to make this another great year for DLD members. The Executive Board will be meeting virtually in May to set the agenda for the coming year. In October, several DLD Executive Board members will be representing children with learning disabilities by again partnering with CLD at their annual convention in Portland, OR, October 11-12. Finally, we hope you will join other DLD members for the CEC Conference next year in Indianapolis, IN from January 29-February 2, 2019.

The Board will be undergoing some transitions this year as Peishi Wang (Queens College, CUNY) replaced Diane Rodriguez as CLD chair and Diane Haager (CSU, LA) will replace Bryan Cook as Research Chair. Additionally, we are pleased to announce that Miriam Ortiz (SMU) as the new Executive Director for DLD. Miriam received her Ph.D. in Education and Human Development from Southern Methodist University in 2017 with a focus on Special Education and Response to Intervention. Prior to completing her Ph.D. Miriam worked in Tallahassee, Florida as a K-12 teacher for students with severe behavior and emotional disabilities.

If you would like to be more involved with DLD activities, please contact officers, committee chairs, or editors by referencing contact information at http://teachingld.org/officers.

*Best,*

*Michael*

---

**Save the Date • January 29-February 2, 2019!**

The **CEC 2019 Convention & Expo** is the largest special education professional development event for all educators! It’s also a great opportunity for you to access high-quality, evidence-based professional development all in one place. See you in Indianapolis!

For details go to: [www.ceccomvention.org](http://www.ceccomvention.org)

---

Be sure to download DLD’s **Learning Disabilities Research and Practice App** and have the latest research right at your fingertips! Available on the App Store for iOS devices.
Cohen’s $d$ and Hedges’ $g$—What Are They And Why Do I Care?

Bryan G. Cook, Lysandra Cook, & William J. Therrien
University of Virginia

Perhaps you have read experimental studies that report effect sizes such as Cohen’s $d$ or Hedges’ $g$ and wondered, “what exactly do these effect sizes mean and why they are important?” We provide a brief answer to those questions here, and refer interested readers to an article in the May issue of Learning Disabilities Research & Practice (Cook, Cook, & Therrien, 2018; https://onlinelibrary.wiley.com/doi/abs/10.1111/ldrp.12167) for a more detailed discussion of group-difference effect sizes.

Traditionally, researchers have used probability values ($p$-values) to interpret statistical analyses conducted in experiments and other studies. Although $p$-values provide important information, such as the likelihood that the null hypothesis is true given the results of the study (see Travers, J. C., Cook, B. G., & Cook, L. (2017). Null hypothesis significance testing and $p$-values. Learning Disabilities Research & Practice, 32, 208-215. doi: 10.1111/ldrp.12147), they also have important limitations. For example, $p$-values are influenced by sample size. Therefore a study with hundreds of participants can yield statistically significant findings, which is traditionally indicated by a $p$-value of $<.05$, even if the difference in performance between the treatment and control groups is small and not practically important. Conversely, large and potentially important differences between groups can result in nonsignificant findings ($p > .05$) when studies involve a small number of participants. Therefore, researchers now commonly provide effect sizes in addition to $p$-values when reporting group experimental studies.

Cohen’s $d$ (named after Jacob Cohen) and Hedges’ $g$ (named after Larry Hedges) are commonly used effect sizes in group-experimental research that indicate the magnitude of the effect of an intervention or treatment. Both $d$ and $g$ represent the difference in performance between the treatment group, which receives the intervention, and the control group, which experiences “business as usual” conditions. As such, a $d$ or $g$ of 0 means that, on average, study participants in the treatment and control groups performed the same. A positive $d$ or $g$ means that participants in the treatment group outperformed those in the control group; whereas a negative $d$ or $g$ indicates that control group outperformed the treatment group. The larger the value of $d$ or $g$, the greater the difference between the groups in terms of performance.

In addition to providing a metric that is not influenced by sample size (as $p$-values are), effect sizes are also standardized, which helps research consumers interpret study findings and compare results across studies. For example, a 5-point mean difference between groups would indicate a large and meaningful effect if everyone in the control group scored between 10 and 12 on a test, and everyone in the treatment group scored between 15 and 17 on the same test (i.e., little variance in student performance). However, a 5-point mean difference would represent a small and trivial effect if test scores for the control group ranged from 0 to 95, and scores for the treatment group ranged from 5 to 98. To control for variability in participants’ performance on the outcome measure, group-difference effect sizes are standardized by dividing the difference between the groups by the standard deviation of the dependent variable. Cohen’s $d$ and Hedges’ $g$ are very similar and are interpreted using the same guidelines, though Hedges’ $g$ is calculated to correct for a slight tendency of Cohen’s $d$ to overestimate effects.

Cohen (1988) provided loose guideline for interpreting $d$, which can also be applied to Hedges $g$. Cohen suggested that $d$ should be at least 0.2 to be considered a small effect, at least 0.5 to be considered a medium effect, and 0.8 or greater to be considered a large effect. However, he cautioned that these values should not be used as hard-and-fast rules, because effect size is affected by many factors related to the context of the study. For example, students with disabilities and older students tend to not make as large of improvements in response to a new practice as students without disabilities and younger students. Additionally, using a researcher-created assessment that is closely tied to the intervention tends to produce larger effects than when researchers use a standardized assessment. The conditions of the control group influence the effect size as well. If “business as usual” in the control group consists of instruction using a highly effective practice, effects will be much smaller than if the control group receives ineffective or no instruction. Accordingly, although a $d$ (or $g$) of 0.45 is small according to Cohen’s guidelines, it might be considered to be medium or even large effect in a study of high-school students with disabilities using a standardized assessment. Thus, Cook and colleagues’ (2018) take-home message is that group-difference effect sizes, “enable research consumers to evaluate the practical importance of study findings when considered appropriately in the context of study characteristics such as participants, dependent variables, and comparison conditions” (p. 56).

References


DLD Highlights from DISES

At the annual DISES conference in Capetown, DLD Past President Stephanie Al Otaiba presented guidance for training teachers and parents how to conduct Dialogic Reading, which is an evidence-based practice to support language and literacy outcomes. She described the research base, provided videos to support training, and shared links to readings. In addition, she highlighted other DLD alerts and resources that support professional development for teachers working with students with or at-risk for learning disabilities. Other former DLD board members and DLD members attended the DISES conference to promote collaboration across these two organizations. Al Otaiba is a professor in the College of Education at Southern Methodist University.

DLD Research Committee Report • 4/16/2018

Members: Bryan Cook (Chair), Michael Solis, Jessica Toste, Alison Boardman, Diane Haager, Elizabeth Hughes, Amy Boele, Stephanie Morano

Completed Tasks:

- Current Practice Alert on “Brain-Based Learning” (“use caution;” Amy Ruhaak) completed, edited, and published
- Updated Current Practice Alert “Co-Teaching: A Current Practice Alert Update” (Sara Cook & Kimberly Landrum) completed, edited, and published
- Diane Haager has agreed to serve as the new Chair of the DLD Research Committee. She will step into the role in Summer 2018.

Upcoming Tasks:

- Finish Current Practice Alert on data-based decision making (Nathan Clemens & Jessica Toste, Alison Boardman, editor)
- Finish update on Current Practice Alerts on Reading Recover (Tisa Aceves)
- Solicit and review applications for next year’s John Wills Lloyd Doctoral Research Award

The Joseph James Morelli Scholarship Fund, under the umbrella of the Park City Community Foundation, awards scholarships to college students with dyslexia and other learning differences who are pursuing post-secondary education in the STEM (Science, Technology, Engineering, Math) fields. The Morelli Scholarship Fund mission is to “honor Joseph’s spirit with scholarships to recognize learning challenged students and empower them to believe in themselves”. The Morelli Scholarship Fund has been recognized by Money Magazine as one of only a few scholarships in the country that support learning challenged high school and college students interested in STEM. Scholarship funds may be used towards tuition, testing, and resources that are needed to assist students in navigating an often highly stressful and challenging learning environment.

Over the past three years, nearly $100,000 in scholarship funds have been awarded to 60 students across the country. More importantly, the scholarships provide recognition, confidence, and support, which the organizers often hear is more valuable and powerful than financial support. For more information on the scholarship and the recipients to date, please visit http://parkcitycf.org/morelli/
OFFICERS AND COMMITTEE CHAIRS

Subdivision Contact Info

FLORIDA – Diana Morales  
Florida@TeachingLD.org
IDAHO – Margaret Gross  
Idaho@TeachingLD.org
ILLINOIS – Elizabeth Mackie  
Illinois@TeachingLD.org
KANSAS – Irma Brasseur  
Kansas@TeachingLD.org
MISSOURI – Sarah Bates  
Missouri@TeachingLD.org
NEW JERSEY – Marie Segal  
NewJersey@TeachingLD.org
NEW YORK – Dee Berlinghoff  
NewYork@TeachingLD.org
NORTH CAROLINA – Debbie Holzberg  
NorthCarolina@TeachingLD.org
OHIO – Janice Kelley-Stafford  
Ohio@TeachingLD.org
ONTARIO – Amy Shannon  
Ontario@TeachingLD.org
PENNSYLVANIA – Carolyn Berenato  
Pennsylvania@TeachingLD.org
SOUTH CAROLINA – Susan Thomas  
SouthCarolina@TeachingLD.org
UTAH – Dan Elbert  
Utah@TeachingLD.org
WISCONSIN – Jackie Blumberg  
Wisconsin@TeachingLD.org

Meet our Officers, Committee Chairs, and Editors.

Go to: http://teachingld.org/officers and click on an officer’s name (if highlighted) to view a brief biography. To contact a member of the executive board, visit: http://teachingld.org/contact_forms/new

Meet our Officers, Committee Chairs, and Editors.

Officers

PRESIDENT
Stephanie Al Otaiba

PRESIDENT ELECT
Jeanne Wanzek

VICE PRESIDENT
Kristen Sayeski

PAST PRESIDENT
Linda Mason

SECRETARY
Michael Faggella-Luby

Treasurer
Margaret Weiss

EXECUTIVE DIRECTOR
Nancy Mamlin

Committee Chairpersons

PUBLICATIONS AND COMMUNICATIONS COMMITTEE
William Therrien
Shaqwana Freeman-Green
Kristen Ashworth
Delinda van Garderen
Douglas Dexter
Hank Fien
Abby Carlisle

RESEARCH COMMITTEE
Bryan Cook

PROFESSIONAL DEVELOPMENT, STANDARDS, AND ETHICS COMMITTEE
Jessica Wery
Devon Keams
Sarah Conoyer
Chris Lemons
Stephen Ciullo

MEMBERSHIP COMMITTEE
Devin Keams
Michael Hebert
Diana Morales
Debbie Holzberg
Miriam Ortiz

PUBLIC POLICY COMMITTEE
David Bateman

CULTURAL AND LINGUISTIC DIVERSITY COMMITTEE
Diane Rodriguez
Michael Orosco
Regina Brandon

STUDENT ACTIVITIES
Carlos Lavin

Editors

JOURNAL EDITOR
Linda Mason

WEB EDITOR
Margaret Weiss

NEWSLETTER EDITORS
Sarah J. Watt
Shaqwana Freeman-Green