It’s hard to believe that school is out, which means that summer is here! CLD’s calendar spans from July 1 to June 30; thus, as the outgoing president of CLD, this is my last President’s Message to CLD members. First, and foremost, I want to thank you for your continued interest in and support of CLD. I hope your membership is rewarding as you work in some capacity with individuals with learning disabilities (LD) and their families. The Board of Trustees (BoT) does not lose sight of the motto “Members Matter!” So, please don’t hesitate to let us know if there are ways we can support your work as we gear up for the new CLD year beginning July 1, 2016.

Second, outgoing presidents typically reflect on the past year’s accomplishments of their respective organizations, and I would like to take this opportunity to do just that. I am pleased to say that CLD’s conference remains one of the prominent features of the organization as a means of providing professional development and offering networking opportunities for conference participants. The 2015 conference in Las Vegas was a huge success due largely in part to the hard work of the Local Arrangements Committee and CLD’s conference co-chairs. The conference is an exciting time not only because of the quality of presentations and speakers but also because of the awards that are presented to outstanding teachers, service providers, and researchers. We also welcome the opportunity to greet officers and members of our state/regional chapters and many new and returning national and international members. Be sure to check out our website to download presentations from the 2015 conference! We look forward to seeing you at the 2016 conference in San Antonio (see CLD’s website [www.council-for-learning-disabilities.org] for information about the hotel and registration).

Another strong feature of the organization is the Leadership Academy (LA), which is under the direction of the Leadership Development Committee. The LA continues to attract applications from professionals who wish to (a) make a contribution to the organization and the field of LD and (b) work with outstanding mentors who help them to grow professionally. Certainly, we are very proud of these up and coming leaders in our field and look forward to them assuming leadership roles in CLD.

Yet another feature of CLD that I want to highlight is the work being done by state/regional chapter officers. This year it was exciting to learn about the activities chapters are providing to their local members, including workshops, regional conferences, awards for outstanding professionals, and newsletters. Contact CLD’s executive director, Linda Nease (lneasecld@aol.com), if you would like information about a chapter near you!

Probably one of CLD’s best features are the many ways that you can stay informed and learn about the organization’s activities and research. Stay connected with CLD this summer through various options. You can check (continued on page 8)
Math Anxiety in Students with Learning Disabilities: Identifying and Reducing the Fear

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University of Nevada Las Vegas

When students in a typical classroom experience intensified worry or negative thoughts during academic tasks, educators may have difficulty directly identifying the feeling as anxiety. For students with learning disabilities (LD), similar characteristics of anxiety can also be challenging to identify. Ashcraft and Krause (2007) indicated that in the last four decades researchers have been paying close attention to anxiety and have suggested a linear relationship between anxiety and math. Math anxiety, a specific subsection of generalized anxiety, has many characteristics that manifest within the classroom environment. Lyons and Beilock (2011) stated that emotional feelings of worry, nervousness, and being scared during math instruction are all characteristics of math anxiety. Students with math anxiety display physical attributes such as restlessness, nausea, sweaty palms, and trouble breathing during math instruction and when performing operations (Akin & Kurbanoglu, 2011).

Young, Wu, and Menon (2012) defined math anxiety as a “negative emotional response that is characterized by avoidance, as well as feelings of stress and anxiety in situations involving mathematical reasoning” (p. 492). Lindbeck and Dambrot (1986) found that more than half of students in a typical math class experience a form of math anxiety. Teachers therefore should be aware of skill building that could be affected, including thought processes or logic that involves conceptual knowledge, higher order thinking, and different levels of basic computation. An eminent study by Hembree (1990) showed that an overwhelming majority of research on math anxiety and math performance indicated a strong correlation between lowered math achievement and higher levels of math anxiety. Furner and Duffy (2002) identified math anxiety as having an extreme effect on students and their confidence levels, as well as on their performance in mathematics. While research on the math anxiety experienced by students with LD is limited, there are several indications that these students may be affected by math anxiety in very similar ways to those of their typical peers. Since math anxiety has an impact on the outcomes of students, educators need to know how to identify math anxiety and how to intervene when it exists.

Editor’s Note: This column is designed to provide CLD members with a synopsis of the current information available in the literature related to a specific topic in the field of learning disabilities. Author(s) are asked to provide an overview of the literature and recommendations for next steps in addressing the identified issues.

Math Anxiety and Students with Learning Disabilities

One characteristic that students with LD display is fundamental anxiety. Nelson and Harwood (2011) stated that in the last several years educators and researchers have become more aware that students with LD are dealing with higher levels of general anxiety than their typical peers. Regardless of the lack of empirically sound evidence for this theory, the mere fact that professionals in the field are discussing the topic is an important shift. Students with LD have also been shown to experience academic struggles in math class in regards to mastery of procedural knowledge and conceptual understanding (Judge & Watson, 2011), which are similar to the difficulties in mathematical reasoning that Young et al. (2012) identified in their definition of math anxiety.

Students with LD also struggle with self-determination. Zheng, Erickson, Kingston, and Noonan (2014) noted that self-determination was a predictor of academic achievement for students with LD. These students tend to show lower levels of self-determination skills, which is a similar factor to the internal influences that affect student self-esteem and motivation (Rodrigues, 2012). Focusing on these factors of general anxiety, low performance in math, and self-determination can be compelling when considering math anxiety for students with LD, and helpful when operationalizing exactly how math anxiety manifests in this population.

Other associations of math anxiety in students with LD may include the significant mention of a relationship between working memory deficits and high levels of math anxiety during academic performance (Ashcraft & Krause, 2007; Miller & Bischel, 2004; Ramirez, Gunderson, Levine, & Beilock, 2013; Young et al., 2012). Visual working memory is a connection between processing visual cues and the act of making sense of what the student is viewing. Students with LD display deficits in visual processing that have been seen to affect math skills (Furner & Duffy, 2002), although there is not a distinct relationship with math anxiety for this population. If there are indications that working memory has

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particular effects on math anxiety and its association with academic performance, perhaps more empirical evidence is needed to support this theory and to further look into the ideology that students with LD experience math anxiety independent from their disability.

While students with LD are more likely to encounter anxiety than their peers without LD, identification of variables that increase this risk is lacking (Nelson & Harwood, 2011). What can be understood are the deficit areas that are similar in both populations when examining math anxiety and its mannerisms. Looking at these main contributors can support educational professionals who are working with students with LD in (a) directly identifying math anxiety in students with LD and (b) understanding how specific support can be developed.

**Current Identification of Math Anxiety**

Identification of math anxiety is possible in various formats. However, a majority of research studies have centered on measuring math anxiety via qualitative and self-report assessments, such as Likert scales, questionnaires, observations, and surveys (Finlayson, 2014). Specific measurements of anxiety and the connection to math include the *Revised Mathematics Anxiety Rating Scale of Elementary School Students* (MARS-E) and the *Spence Children’s Anxiety Scale* (Wang et al., 2014), which measure anxiousness during math problem solving, offering a look into the cognitive side of math anxiety. A small number of studies have shown how math anxiety affects math exam performance and achievement tests, using the *Woodcock Johnson III Tests of Achievement* to assess problem solving, math computation, and number rationality (Wang et al., 2014). While assessments have been administered to students who are showing signs of frustration in math class, there is uncertainty as to whether these assessments are directly identifying the anxiety as math-related or more generalized. This is especially uncertain for students with LD.

**Current Interventions for Reducing Math Anxiety**

Over the last decade, there has been a focus on determining which deficits should be a priority as the cause of math anxiety, and thereby a priority focus for intervention. Importantly, there is minimal validation of the effectiveness of suggested interventions and practices designed to reduce math anxiety, and little research regarding which specific populations of students benefit the most. Furner and Duffy (2002) suggested strategies for educators to use directly in the classroom for students experiencing math anxiety during instruction, including (a) having students write in journals to address and express feelings before and after instruction, (b) aligning curricula with fictional books that foster positive thinking about math and math-related activities, (c) using best practices in the classroom during instructional time to promote differentiated support, and (d) emphasizing attitude and opinion change.

Some studies (Hembree, 1990; Schoenfeld & Mathur, 2009; Zyl & Lohr, 1994) have addressed reduction of math anxiety using relaxation techniques, in the form of systematic desensitization, a combination of relaxing the body’s muscles while performing exercises that involve imagination. For example, Zyl and Lohr found that while this process has positive results with regard to decreasing general anxiety, it also has been found to support reducing math anxiety in high school–age students, which can result in independent practice. However, while Furner and Duffy (2002) mentioned students with LD using suggested strategies, studies of other techniques have not addressed populations of students with disabilities, particularly learning disabilities.

**The Road Ahead**

A look at the main components of identification of and support for reducing math anxiety in students with LD can provide a systematic framework for recommendations and future research. With more empirical research focused on math anxiety and its impact on students with LD, the process of strong and supported identification leading to development of strategies to reduce the anxiety occurring during math performance can, it is hoped, begin.

**Screening and Identification Procedures**

Using measures that have been shown to be valid at recognizing and associating math anxiety for typical students could possibly be the first step in proper identification of math anxiety in students with LD. Developing identification instruments that take characteristics of students with LD into consideration should also be considered. Identification of math anxiety needs to become more significant and empirically based for students with LD. Recognition of similar deficit areas in math achievement and self-determination, both in typical students and students with disabilities, can help the process of developing more appropriate measures of math anxiety for students with LD. Due to a lack of disability-specific instruments regarding math anxiety, there is a need for studies to increase awareness that immediate identification can be beneficial for beginning to understand the link between math anxiety and math performance.

This suggestion also includes using multiple formats for identification of math anxiety. While surveying and questioning students may give insight into the inner and personal characteristics of anxiety, various observational procedures could be used to show diverse viewpoints of the trait’s manifestation. Using a form of third-party reporting can help shed
light on physical characteristics that are not being reported by the student due to being oblivious or even embarrassed. Outside observations can also be used when addressing early identification in young students. Ramirez et al. (2013) stated that intervening with math anxiety at an earlier stage of development can avoid the difficulties that students may face as they progress in their educational careers. Most research examining math anxiety or anxiety during academic instruction looks at individuals in a range from upper elementary school–age to adulthood. If early intervention is critical in special education to unlock effective support, then perhaps using a younger population of students with LD can be beneficial when implementing future studies. The results could further our understanding of the relevance of math anxiety to math achievement and broaden the path of inquiry into the use of effective instructional techniques that might reduce math anxiety and increase academic performance (Ramirez et al., 2013). However, until there are more data-based identification measures of math anxiety in students with LD, implementing recommended strategies may be the only line of defense in the classroom.

Interventions

The approach to ameliorating math anxiety in students with LD is using well-developed interventions. What currently is deemed most appropriate and effective for reducing the anxiety math instruction causes are overall best practices, yet there is a lack of evidence-based strategies specifically focused on math anxiety. For students with LD, effective and evidence-based interventions could result not only in a possible reduction in math anxiety but also in potentially fewer negative behaviors displayed during math instruction, with secondary benefits of increased class participation and self-determination. We need more research on what could successfully support students with LD who are experiencing math anxiety, on a consistent basis in the classroom. Techniques discussed by Furner and Duffy (2002) could be beneficial in supporting students with LD who are encountering math anxiety, especially in building self-esteem with encouraging dialogue and increasing self-determination, with focused attention on positive thinking. Nevertheless, educators can have an important influence on math anxiety in the classroom by working to create a calm, supportive environment to encourage low anxiety levels (Ashcraft & Krause, 2007) and boost confidence.

Putting It All Together

For all students, math anxiety gives the appearance of a difficult and undefined point that educators need to identify and address. Specifically, for students with LD there is not enough research to make a clear and concise call. The first point that should be addressed is the identification that math anxiety exists in students with LD. Once this is recognized, exploration of contributing factors can occur. Once causal relationships are understood, tailored strategies to support students with LD can be investigated to develop evidence-based practices. Educators could then give significant support to students with LD who are encountering fear, apprehension, and worry during math instruction.

References


Research Committee
The Research Committee received a record nine applications for the Outstanding Researcher Award and will announce the award recipient on August 15. In addition to considering nominations for this award, the committee selects two Must Read articles, one from Intervention in School and Clinic and the other from Learning Disability Quarterly, based on a pool of nominees from the editors of those periodicals.

Also, take a look at CLD’s newly updated Research to Practice Corner (http://www.council-for-learning-disabilities.org/infosheets-supporting-translation-of-research-to-practice). The Research Committee is in the process of updating the formatting and content of these documents to better meet the needs of the CLD community and our stakeholders. If you have an idea for a Research to Practice document you’d like to see the committee add, or if you’d like to author one yourself, please contact Kelli Cummings (kellic@umd.edu).

Technology Committee
The Technology Committee has been busy this past year! The primary responsibility of this committee, per the CLD bylaws, is to maintain and update the CLD website and other technology-based avenues for disseminating information about the work of CLD and about evidence-based practices and policy issues related to working with students with LD. To this end, the committee has worked cross-collaboratively with other committee chairs on the Board of Trustees (BoT) to ensure that information posted to the website is current and up-to-date and that information is shared in a timely manner with members. Recently, the BoT decided to move the social media editor position under the umbrella of the Technology Committee for seamless dissemination of information across all platforms. The committee has also been working closely with the vice president and the Leadership Development Committee to process conference proposal submissions and nominations for awards.

This summer, the Technology Committee will begin work on developing tools and resources related to the integration of assistive and instructional technologies into the individualized education of students with LD. The committee will start with a literature review on these topics and then will move into the development of a tool to support educators in using assistive and instructional technologies. If you are interested in joining our work, please contact Lisa Morin (lmoril@odu.edu) or Joseph Morgan (joseph.morgan@unlv.edu) for more information.

Communications Committee
The Communications Committee has been actively involved in several cross-committee collaborations to further the mission and goals of CLD:

1. With the Membership Committee, the Communications Committee has been discussing:
   • A revision of member benefits to add items that all members will receive, as well as developing and providing directions for accessing journals to be disseminated to all CLD members;
   • Development of a template for securing member bios to highlight CLD members and then sharing these bios via social media; and
   • A new membership brochure, using updated images and pictures.

2. Additionally, our committee has been working with the Research Committee to (a) update the Research-to-Practice Corner (formerly Infosheets) and (b) decide which to keep and which to archive, while still making them accessible to members.

Liaison Committee
The Liaison Committee has been especially busy this spring. Debi Gartland represented CLD for a three-day meeting at the National Joint Committee on Learning Disabilities (NJCLD), which was rescheduled from the winter. Although not all representatives from member organizations could attend due to the rescheduling, work was completed on the most recent paper, which will be sent out to all of the organizations’ boards for approval within the next few weeks.

The Consortium for Citizens with Disabilities (CCD) Education Task Force has been involved in several areas this spring. In March, attention centered on making recommendations regarding the “additional indicator(s) of school quality or student success” allowed to states as they create their State Plans required under ESSA. A full copy of the recommendations will be available on the CLD website. CCD also made recommendations to the House and Senate Education Committees regarding the Perkins Act reauthorization. These recommendations will also be included on the CLD website. The final meeting of the ESSA negotiated rule-making committee was held in April. At this point, CCD is commenting on the notice of proposed rulemaking published in the Federal Register regarding disproportionality in special education. Additional updates will continue to be added to the CLD website.

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Colorado Chapter News

The Colorado Council for Learning Disabilities (CCLD) works with CoMMIT to provide comprehensive professional development and guidance to Colorado mathematics educators. We would like to share with our CLD colleagues the newly developed recommendations on progress monitoring. This process includes the collection of work samples, observations, and short quizzes collected from daily instruction and is a key component of a comprehensive body of evidence that does not disrupt instruction. See the full recommendations on the CLD website (http://goo.gl/VFdiFq).

Maryland Chapter News:

On May 10th, the Maryland CLD Chapter held a professional development and recruitment event targeting graduating special education majors and early career special education teachers. The event was held at CLD BoT member Debi Gartland’s Towson University Professional Development School in Howard County. Maryland Student Council for Exceptional Children and Best Buddies chapters were also invited. Approximately 40 current and soon-to-be teachers attended! After receiving information on CLD and membership materials, the group was treated to an excellent presentation by CLD BoT member Roberta Strosnider and Val Sharpe on teaching executive function skills. An early invitation to assist with the 2017 CLD conference was extended to all.

Texas Chapter News

The Texas CLD Chapter would like to congratulate and welcome the newly elected Board members for 2016–2017, Dr. Kristi Santi (incoming vice president) and Jennifer Farmer (incoming secretary), who will start their terms on July 1.

Check out the new TCLD website (http://texascld.strikingly.com), and follow TCLD on Instagram (texascldchapter) and Twitter (texas_cld).

Virginia Chapter News

Virginia Council for Learning Disabilities hosted its annual state symposium on April 30, 2016, in Harrisonburg. Attendees were engaged in a lively keynote session led by Mr. Ron Nash, then enjoyed a poster session and an afternoon filled with informative breakout sessions. At the awards luncheon, Mrs. Kit Williams was honored as Virginia’s Outstanding Teacher of the Year.

CLD Membership Dues Vote

CLD members recently voted to approve an increase in their membership dues, which will take effect on September 1, 2016.

The new rates will be:

**$130 for professional members**
and

**$55 for student members.**

The retired member rate of $60 remains unchanged. The CLD Executive Committee and Board of Trustees believes this will help the organization increase support for chapter activities, as well as allow for continued provision of support, benefits, and information received by all members at a national level.

CLD NEWS & NOTES . . .

- Presenters for the CLD 2016 Conference in San Antonio have been notified of their proposal status. Reminder to all members to register for the conference! For additional information go to this website: (http://goo.gl/CvSdoi).
- LD Forum is currently seeking manuscripts, including submissions for two new columns: “Point/Counterpoint” and “Current Issues in Review.” For manuscript submission guidelines, visit this webpage (http://goo.gl/PcgWUI). We are also seeking individuals to serve on our review board. Contact Editor Joseph Morgan (ldforum@unlv.nevada.edu) for more information.
- Check out the latest issues of Learning Disabilities Quarterly and Intervention in School and Clinic! Also, consider submitting your work for publication in our flagship journals.
- Not currently a member of CLD? Join us at: cldinternational.org!
Each year, the Council for Learning Disabilities recognizes outstanding teachers who are CLD members and who consistently provide quality instruction to students with learning disabilities. The Teacher of the Year award recipients, selected by local chapters, provide direct services to students. The CLD 2015–2016 Teacher of the Year Recipients are:

**Floyd G. Hudson Service Award**

*Teacher of the Year Awards*

**Heather Creech, Colorado CLD Chapter**

*SLP and special education generalist, Student Achievement Services Department, Cherry Creek High School*

Heather is a speech-language pathologist and special education generalist in the Student Achievement Services Department at Cherry Creek High School. She received her BA from Arizona State University and her MA from the University of Cincinnati. In addition to providing speech and language services for students in the moderate and severe needs programs at CCHS, Heather teaches intervention-based reading and writing classes for students in Grades 9 through 11.

**Robert A. Schaefer, Nevada CLD Chapter**

*Special education teacher and department chair, Rex Bell Elementary*

Robert Schaefer, MAT, is a special education teacher and special education department chair at Rex Bell Elementary School in Clark County School District in Las Vegas. He has been a special education teacher for seven years in urban settings in both Illinois and Nevada. Mr. Schaefer makes sure all of his students have access to the curriculum by using explicit instruction, scaffolding, assistive technology, and strategy instruction coupled with respect, love, and a human one-to-one connection.

**Lesli Dawn Raymond, Texas CLD Chapter**

*Grade 3 team lead, Beaver Math Science Technology Center*

Lesli is a third-grade teacher at Beaver Creek Elementary School in Garland, Texas. She adapts instruction to meet the needs of various learners, including students with, or at risk for, learning difficulties and disabilities. Lesli is committed to ensuring that every student reaches their full potential. Her students— despite learning differences and disabilities, as well as challenges such as poverty—consistently perform at or above grade level.

**Katrina Williams, Virginia CLD Chapter**

*Special education teacher and special education department chair, James River High School, Botetourt County Public Schools*

Katrina is currently a teacher and special education department chair at James River High School, where she has served the past 10 years. She has established herself as a leader in the Special Education Department by instituting innovative instructional practices, providing professional development for staff members, and mentoring new special education teachers. She leads school-based committees to ensure appropriate instructional interventions for students and to support transition to post-school opportunities for the students at the high school.

**Floyd G. Hudson Service Award**

*Mary Pitman, PhD*

*Math content specialist, Colorado Department of Education*

In her role as the math content specialist for the Colorado Department of Education, Mary has promoted and supported professional development statewide for math teachers and special educators seeking to enhance their skills in working with students who struggle to learn math, including students with math-related disabilities. Mary brings high-quality professional development aligned with new standards and the latest research on math instruction to the state. She earned her undergraduate degree from the University of Northern Iowa and her PhD in instruction and curricula for mathematics from the University of Colorado at Boulder.
out our social media (Facebook, Twitter) to remain updated on the many activities occurring in the organization. The Research to Practice Corner (formerly called Infosheets) on CLD’s website offers downloadable information about current topics in the field. Upcoming issues of the journals Learning Disability Quarterly (LDQ) and Intervention in School and Clinic will offer the latest research and research-to-practice ideas in the field. Don’t miss the LDQ podcasts featuring prominent researchers who discuss critical ideas on key topics in the field and their special issues in the journal. And of course, don’t miss future issues of the LD Forum to stay informed about the organization’s many activities.

Turning to our field, as noted in my first President’s Message, we know that LD ranges from mild to severe, yet it is those students with the most severe needs who continue to challenge the field and researchers. Thus, the BoT concentrated many efforts during the past year on the president’s charge to focus on the needs of students with severe LD. Committees are addressing issues surrounding serving these students. One outcome is that at the 2016 conference several presentations will concentrate on intensive interventions for students with severe LD. Another outcome will be the availability of a Research to Practice Corner publication specifically on this topic. These are just a few examples of how CLD’s committees have devoted their efforts to the charge for the year.

In closing, I would like to take this opportunity to thank the BoT for their tremendous work on behalf of CLD. Each committee chair/co-chair has provided strong leadership to enact the action plan for the year with outcomes that can be found on the website, on social media, and in the journals. I extend a huge welcome to CLD’s incoming Executive Committee presidential chain, effective July 1, as they move to their next position: President Beth Calhoon, President-Elect Deborah Reed, and Vice President Sheri Berkeley. I also want to thank immediate Past President Steve Chamberlain, who will be rotating off the Executive Committee. I would like to welcome incoming Treasurer Minyi Shih Dennis and extend a huge thank you to outgoing Treasurer Dave Majsterek, who worked diligently as Finance Committee chair to ensure that the organization remains on solid financial ground. Also, Kat Pfannenstiel will be completing her three-year term as Professional Development Committee chair; thanks, Kat. Finally, I would like to extend my gratitude to CLD Executive Director Linda Nease, who is the glue of the organization and keeps us all on track. She is the person who is the “constant” from year to year, working with new and returning officers and committee chairs. Thanks to all of you for helping to make this a terrific, productive year!

If you want to get involved, contact Linda Nease, who will help you get started. As a member of CLD, please plan on renewing your membership and staying a part of the CLD family. I wish you a wonderful summer and we’ll see you in October at the 2016 conference in San Antonio.

Best,

Diane Pedrotty Bryant
CLD President

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CLD Mission & Vision

**Mission Statement:** The Council for Learning Disabilities (CLD), an international organization composed of professionals who represent diverse disciplines, is committed to enhancing the education and quality of life for individuals with learning disabilities across the life span. CLD accomplishes this by promoting and disseminating evidence-based research and practices related to the education of individuals with learning disabilities. In addition, CLD fosters (a) collaboration among professionals; (b) development of leaders in the field; and (c) advocacy for policies that support individuals with learning disabilities at local, state, and national levels.

**Vision Statement:** All individuals with learning disabilities are empowered to achieve their potential.