

College of Education
2017 Virgil Orr Junior Faculty Award Nominee

Lynne Nielsen, Ed.D.

Assistant Professor, Curriculum, Instruction, and Leadership

Fall 2016 EDCI 125-001 3.9 36 100% EDCI 125-002 4.0 29 100% UTCH 101-H01 3.8 11 100% UTCH 101-H02 4.0 9 100% UTCH 101-H05 3.5 2 100% UTCH 101-001 4.0 12 92% UTCH 101-002 4.0 10 90% UTCH 101-005 3.9 19 95% UTCH 101-006 4.0 11 100%	Winter 2017 EDCI 125 3.9 51 98% EDCI 420-004 ** 35 100% EDCI 421 3.8 12 100% EDCI 422 3.7 17 94% UTCH 201-001 4.0 10 90% UTCH 201-002 4.0 20 90%	Spring 2017 EDCI 125 35 EDCI 421 24 EDCI 422 11 UTCH 201 H01 3 UTCH 201 001 6
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*Instructor not evaluated **Field-based n/a

Rating based on a 4-point scale, class name, overall course rating, number of students enrolled, and retention rate included, respectively. I was unable to collect data that differentiates between categories of students withdrawn (F, L, N) so reported figures indicate all dropped students.

#2. Statement of beliefs concerning the significance of teaching, research, and service within the overall mission of LA Tech:

The overall mission of Louisiana Tech University sets as its highest priority the education and development of its students in a challenging, yet safe and supportive, diverse community of learners. Although I see research and service as an integral part of my job, my focus is teaching. Teaching is what I love. Even on the worst of days, I feel swept away from all the pressures of the world by engaging with my students in class. Engaging with students gives me the opportunity to develop lifelong professional relationships. Interestingly, I have the luxury of not only teaching content, but I teach pedagogy. So, I get to teach others HOW to teach. Specifically, my love is sharing with aspiring teachers how children think and learn mathematically. Clearly mathematics education is a heavily debated topic as professionals attempt to determine the most effective ways for children to learn. As more brain research is reported, alongside the increased emphasis in STEM education at younger ages, **research** on mathematics education is ever crucial. Additionally, disseminating mathematics research to practicing and pre-service teachers is a service that I do not take lightly and one to which I am consistently involved. Over the past several years, I have had the luxury of working with an amazing research group from Florida State University to develop and publish an assessment instrument used to measure early elementary teachers' mathematical knowledge for teaching. This instrument will help us determine useful training for elementary mathematics teachers, and in turn, strengthen mathematics instruction.

My fundamental belief about **teaching**, although I have strong convictions regarding mathematics education, is that we teach students, not courses or subjects. Teaching is fundamentally about building relationships with others. This belief fits in concert with the First-Year Experience (FYE). I started teaching that course in 2013 when it was called University Seminar and continue to participate in all First-Year Experience activities. It is my belief that teachers/professors can't truly connect with their students if they do not show a vested interest in the whole student, which includes both inside and outside the classroom. The university seminar class (FYE) enables me to connect at a very personal level with incoming freshmen. This class is the BEST! I love interacting with my students in fun ways that help them see me as a caring human, one that also happens to also be their professor! I also see this course, along with EDCI 125 (Intro to Education), as a fabulous opportunity to make connections with students that will ultimately help ensure retention-a serious concern of LA Tech. I strive daily to portray to students through my actions, not mere words, that I truly do care about them on a personal level, and value their success. This connection gives students a sounding board or support person to contact about problems that arise in their new and sometimes uncomfortable situations as new students in a new place. Clearly the smallest difficulty can be the beginning of failure, and my actions can help make a pivotal decision go the right way because I am willing to offer a bit of advice or help during a critical time. It is my goal to stop my busyness during a student "crisis" and help. If a situation arises that is out of my area, I vow to immediately pick up the phone, walk across campus, or somehow put the student in contact with someone that can address the problem. Doing this is how we retain students!

My classes are challenging and I demand complete professionalism, nothing less. This includes everything from dressing professionally for field experiences to turning in excellent work, even if it means redoing it multiple times, requiring GRADING multiple times. Again, I feel very strongly that I must model for my students the behavior and demeanor that I expect of them. I am enthusiastic, animated, and engaging during class. I *might* have been reprimanded a few times by my department chair for disturbing other groups down the hall as my passion for teaching penetrates the building. 😊 My standards are high, but the work I do matters! I'm preparing future educators to mold our most precious resource, the children who will soon run the world. We, as educators, all have a common goal and that is to impact the lives of children in amazing ways as we prepare them for their future jobs, some of which have yet to be created.

My most recent and important **service** work in the College of Education is the opportunity to serve as committee chair for the CAEP (Council for the Accreditation of Educator Preparation) Standard 3 committee. This standard has a focus on recruitment and diversity. Through my work leading this committee I have discovered that we are actually very similar in the College of Education, lacking true diversity. With this realization, I've become extremely interested in efforts for recruiting high quality, diverse candidates that can connect more easily with a diverse population of students. I have been

working diligently with colleagues to uncover innovative ways to recruit and retain fabulous candidates to Louisiana Tech, particularly to the College of Education, in line with the university mission. Under the direction of Dr. George Noflin, and with the help and support of Sam Speed, Devonia Vaughn and the Office of Multicultural Affairs, the “Call me MISTER” program was discovered. We plan to institute this program at Louisiana Tech in the fall of 2017. It is a recruiting tool in which African American male candidates are selected from Louisiana high schools. These men will commit to the best job in the world, teaching elementary children! In turn, they will be provided with an immense support system to ensure success, not the least of which is financial.

Two additional current service initiatives with which I am intensely engaged is the partnership of the CIL (Curriculum, Instruction, and Leadership) with Bridge to Bulldogs and the development of Future Teacher Education Clubs in surrounding schools. B2B provides support to incoming freshmen who are conditionally admitted to the university and in need of additional academic and non-academic support to ensure a successful start to college. The CIL department, in conjunction with UTeachTech, will provide math tutors for this purpose. The Future Teacher Clubs that are being developed in partner TEaM schools are affiliate groups of A+PEL (the COE teacher education organization). The relationships created from each of these initiatives are expected to enhance the recruitment and retention of diverse candidates to our college.

In summary, I believe that teaching is the best job in the world, at all levels, from the youngest children to the most accomplished doctoral candidates. I also believe that learning lasts a lifetime. I believe that it takes a special person to become an amazing teacher, and I’m lucky enough to meet each one of them passing through the College of Education in my freshman classes UNIV 100 (FYE) and EDCI 125. I believe that most teachers do their best until they learn a way to be better. Therefore, it is my passion to share with my students the current research on how children learn math, and continue to determine ways to help teachers be masters at developing the mathematics content of their students (EDCI 421, EDCI 422, EDCI 420M). I believe that my job does not stop at conducting and sharing research, but demands of me the assurance that teachers know how to use it. I believe it is my responsibility to make great teachers; and to make great teachers better. I believe that teachers teach students-not subjects. Therefore, it is critical that I stay involved in service opportunities that help retain our students at Louisiana Tech, through engaging in personal relationships with each of them, as I encourage them to foster similar relationships with their future students. This is the most important aspect of our work, because the personal relationships with which we engage daily have the potential to change every day of the future of our students, and not just that one student, but his/her entire lineage. I BELIEVE teachers change the world, one student at a time. I know they do, for I am the proof.

#3. Publications, Grants, National Presentations

- Nielsen, L.** & Kent, L. (under development) *Understanding teaching for understanding: Engaging and productive mathematical discussions*, Raburn Publishing, Durham, NC.
- Schoen, R., Bray, W., Wolfe, C., **Nielsen, L.**, & Tazaz, A. (in press) Developing an assessment instrument to measure early elementary teachers’ mathematical knowledge for teaching. *Elementary School Journal*.
- Nielsen, L.** (2016). Teaching for understanding in the early grades. *Arkansas Council of Teachers of Mathematics Quarterly Journal*. 13(1), 2-3, 23-25.
- Nielsen, L.**, Steinhorsdottir, O., & Kent, L. (2016). Responding to student thinking: Enhancing mathematics instruction through classroom based professional development. *Middle School Journal*, 47:3, 17-24, DOI: [10.1080/00940771.2016.1135096](https://doi.org/10.1080/00940771.2016.1135096)
- Kent, L. & **Nielsen, L.** (2015) Connecting equal sharing strategies to proportional reasoning. *Arkansas Council of Teachers of Mathematics Quarterly Journal* 12(3), 6-7, 25-28.
- Mancil, G.R. & **Nielsen, L.** (manuscript in review). Differential effects of math manipulatives and token economy on the percentage of correct responding and challenging behaviors in children with autism spectrum disorder. *Education and Training in Autism and Developmental Disabilities*.
- Nielsen, L.** (2015) Mathematics discourse is more than show-and-tell. *Arkansas Council of Teachers of Mathematics Quarterly Journal* 12(1), 8-9, 19-19-23.

Kent, L., Empson, S., & **Nielsen, L.** (2015) *The richness of children's fraction strategies*. Teaching Children Mathematics.

Nielsen, L. (2015) *Self-study report, Secondary Mathematics, Secondary Mathematics MAT, Middle School Mathematics, Middle School MAT*. National Council Teachers Mathematics.

Nielsen, L. S. (2009). *The relationship between pedagogical content knowledge and mathematics teacher questioning strategies* (Order No. 3358249). Available from ProQuest Dissertations & Theses A&I. (304920072). Retrieved from <http://ezproxy.latech.edu:2048/docview/304920072?accountid=26342>

Nielsen, L. (2011) *What is CGI?* Arkansas Council of Teachers of Mathematics quarterly publication.

Grants

Schillinger, D., **Nielsen, L.**, & Manning, L. (2013). Lagniappe Ladies-\$5,000

Schillinger, D., **Nielsen, L.** & Manning, L. (2012). Core to College, Louisiana Department of Education-\$4,000

Schillinger, D., **Nielsen, L.** & Manning, L. (2013). Core to College, Louisiana Department of Education-\$4,345

Recent National Presentations

Accepted June 2017-National CGI Conference, Seattle, WA, *Understanding Teaching for Understanding*

April 2017-National Council of Teachers of Mathematics Annual Meeting and Exposition, San Antonio, TX, *Students' understanding of fractions-Too important for teaching half-way!*

January 2016-Association of Mathematics Teacher Educators National Conference, Irvine, CA. *Changes in Teachers' Knowledge of Content and Students' Mathematics: Results from a Three-Year Partnership*, Co-Presenters: Laura Kent, PhD, Shannon Dingman, PhD.

June 2015-National CGI Conference, Los Angeles, CA. *Sharing student strategies is not show and tell*.

February 2015-Association of Mathematics Teacher Educators National Conference, Orlando, FL. *Developing a measure of mathematical knowledge for teaching for primary grades math teachers*. Co-Presenters: Wendy Bray, Robert Schoen, Chris Wolf, Amanda Tazaz

April 2013: National Council of Supervisors of Mathematics in Denver, CO. *Engaging the Algebra II Student: A Professional Development Approach*. Co-presenter: Bill Nielsen

June 2013: National CGI Conference in Des Moines, Iowa. Invited speaker. *Engaging Students in Effective Classroom Discussions*.

#4. Additional Service Activities

-Council for the Accreditation of Educator Preparation (CAEP) Standard 3 Chairperson

-College of Education, service on 12 doctoral committees; chair of 5

-Louisiana Tech representative for the state of Louisiana on the Partnership for Assessment of Readiness for College and Careers (PARCC) National Advisory Committee (2013-2016)

-Louisiana Tech University state leadership team for the implementation of Common Core State Standards (2013-2015)

-College of Education Field and Clinical Experiences Committee (2014-present)

-College of Education director of Early Experiences (2015-present)

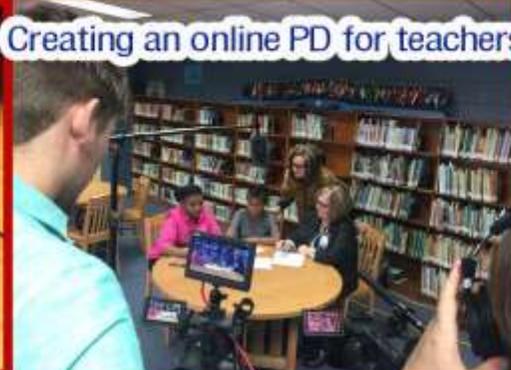
-National mathematics education expert on the planning team for Teachers Development Group. This group writes research based professional development for teachers of early grades P-3 and middle grades 3-6 (2011-present)

-National leader/trainer for Cognitively Guided Instruction and Extending Children's Mathematics (2011-present)

- Louisiana Tech representative at Princeton on the National Praxis Middle School Mathematics Standard Setting Committee
- Faculty advisor for the LA Tech Council of Teachers of Mathematics (2011-present)
- Faculty advisor for the sorority Sigma Phi Lambda (2015-present)
- College of Education Search committees: special education position and educational leadership position within Curriculum, Instruction, and Leadership (CIL)
- Manuscript reviewer for *Mathematical Behavior* and *Teaching Children Mathematics*.
- College of Education chair-Secondary Mathematics, COE chair-Middle Grades Mathematics, COE chair-MAT Mathematics (CAEP) 2014
- OPEO course coordinator/presenter, research behind student-centered teaching in mathematics, particularly Cognitively Guided Instruction. This course prepares parish teachers to support the methods and practicum students with whom they work.
- College of Education workshop facilitator for clinical university faculty, Charlotte Danielson model *Framework for Teaching* (2015-2016)
- Family Math Day coordinator A. E. Phillips Laboratory School Kindergarten (2011-2015)
- Family math night coordinator of math practicum students for Calhoun Middle School (2016)
- Family math night coordinator for Dubach Schools (April 2017)
- National Presidential Award for Excellence in Math and Science Teaching (PAEMST) mentor (2011-present)
- Louisiana Tech Regional Science Fair judge (2013-present)
- Coordinator of resource materials, Winn Parish Math Teachers. (2014)



Parent night at Dubach



Creating an online PD for teachers



Math methods-making a difference

What we do....IT MATTERS!



Freshmen field experience



I taught this DAWG!



Visiting Caddo Parish School