

College of Education
2017 F. Jay Taylor Undergraduate Teaching 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 I was unable to collect data that differentiates between categories of students withdrawn (F, L, N) so reported figures indicate all dropped students.

Statement of beliefs concerning the significance of undergraduate teaching 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. When I began at LA Tech the first class I taught was *EDCI 125: Introduction to Teaching*. This class consists of mostly freshman who are interested in the teaching profession. Right away I figured out that many of these kids are young and unsure of themselves and their decision to become a teacher is often tentative. Immediately I learned that many students desperately need a person on campus to be their advocate. This became my mission. I learned about their homesickness; their terrible sleeping, eating, and study habits; and their lack of direction. Mostly I realized that they needed me to be a person that could HELP THEM! I absolutely made it my mission to fix problems (outside problems, not relating to my class). If I didn't know the answers to their many questions, I found out. I did not tell them to go ask someone else or give directions about where to go and what to do. I immediately attempt to address their problem, or offer a solution, right there, on the spot. If I cannot help, I pick up the phone and call someone that can. I walk students to locations on campus, if necessary. I visit hospital rooms when parents were too far away, and I prove to them that I care about their future, but more importantly, I care about the present concerns that they are encountering at Louisiana Tech. I have become totally consumed in NEVER passing the buck when a student needs help. I realize that my students cannot learn if they first do not feel safe and supported, ironically, the exact thing I teach them about teaching children. How could I not model the same behavior to my own students, even if they are in college? I found out that often students would leave school for things that could easily be addressed but the student felt helpless and uncertain, so I decided that I would be the one to help, and work to keep them at LA Tech.

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. Because of this passion for freshman, my department chair quickly determined the perfect fit for me, *UNIV 100*. I started teaching that course in 2013 and continue to participate in all First Year Experience (FYE) activities. It is my belief that teachers can't truly connect with their students if they do not show a vested interest in the whole student, and that includes both inside and outside the classroom. The university seminar class enables me to connect at an even more personal level with my students. This class is the BEST! I love connecting with my students in fun ways that help them see me as a caring human, one that also happens to also be their professor!

My classes are challenging and I demand complete professionalism, and nothing less. This involves students dressing professionally for field experiences and turning in their best work, even if it means redoing it multiple times. Again, I feel very strongly that I must model for my students the behavior and demeanor that I expect of them. I would never ask a student to do something that I would not want to do myself, and I respect them, their time, and their individuality. I see my students as more alike than different. After all, we all have a common goal and that is to impact the lives of children in amazing ways. With that in mind, I have become extremely interested in recruiting. My work with CAEP Standard 3 has a focus on diversity and has taught me that I was correct, we are very similar in the College of Education, lacking diversity. I've become extremely interested in recruiting more high quality, diverse candidates that can connect more easily with a diverse population of students. I have been working diligently with colleagues (Dr. George Noflin, Sam Speed, and the Office of Multicultural Affairs) to institute a program at Louisiana Tech in which black male candidates are recruited from high school. These men will commit to the best job in the world, teaching

elementary children, and in turn will be provided with an immense support system to insure success, not the least of which is financial.

Description of an important innovation in undergraduate teaching:

Because I love my job and I want everyone to love LA Tech as much as I do, one goal I maintain is to retain candidates. I believe that we, as professors, are the key to retention. I begin with students as they enter the College of Education (UNIV 100, EDCI 125, UTCH 101, UTCH 201). In these classes I work to build relationships in innovative ways. I consider not only my relationship with students, but I also help build and support relationships that are fostered among the students in the class through engaging activities, lively class discussions, and group projects. If students are not engaged, they are not learning, no matter their age. One great way to engage students in their early experiences is using carefully crafted field work. I have collaborated with Dr. Hood and the AEP teachers to develop a plan that engages university students with lab school students and teachers in effective ways. I also work in UTeach as a math content pedagogy expert. UTeach students get their degrees in STEM content areas and their teaching credentials simultaneously. These students are highly engaged in their core area as well as extremely interested and excited to get into the classroom and work with students. My goal with this very bright group is to convey the importance of sound, engaging teaching strategies. I want them to leave my introductory class with the understanding that content knowledge is integral to great teaching, but the teaching profession demands so much more in terms of learning theory, classroom management, and most importantly, building healthy relationships with students, colleagues, administrators, parents, and the community.

As candidates progress through the program we cross paths again in EDCI 421/ 422, math methods. The students in these classes participate in field experience opportunities, as well, but in a much deeper level. The capstone activity for math methods students is the classroom embedded component in which candidates conduct individual mathematics interviews with a class of students from AEP. The candidates practice their questioning skills with the students and return to the university classroom to analyze the student interviews. With the detailed field notes, the students are placed into categories based on the levels of development determined by problem type and solution strategies. Candidates then work together to determine a focus group, write a learning goal, and collaboratively create a plan to engage students in the learning goal. Then we immediately return to the classroom and I conduct the lesson. The candidates watch me interact with the students as I follow their plan. Concluding the lesson, students are presented with a follow-up problem to assess their learning. Teacher candidates collect the work from the students and analyze the effectiveness of the lesson in terms of evidence of student growth. This brings us full circle.

Last stop for the candidate is clinical residency. I am the math content component of the *TEaM* (Teachers, Educators, and Mentors) model that is the premier clinical residency program in Louisiana, housed right here at Louisiana Tech. I work with the candidates, mentors, and other members of the *TEaM* to support research based mathematics instruction in our candidate's clinical experience. I conduct observations and evaluations of the candidates and provide support, ideas, and advice to them every step of the way.

In summary, I am the first professor most students see in the college, I stay connected with them throughout the program from their first quarter in university seminar and/or Intro to teaching, then to methods coursework, all the way to the culminating experience of clinical residency. I strive to maintain a positive relationship with each one throughout the entire undergraduate experience.

Publications

- 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.

Recent National Presentations

- 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*.



Math Methods class working with AEP students using outdoor activities!



Math methods class meets with Marsha Tate to learn the Seven Habits of Highly Effective People- a collaboration with teachers from AEP Lab School!



Waiting with Ali for mom to arrive from out of town!



Posing with officers of the LA Tech Council of Teachers of Mathematics.



One of my biggest honors-being invited to throw out the first pitch at the LA Tech softball game!



Photo op with methods textbook lead author, Tom Carpenter!



Teaching career highlight-being selected as guest coach for LA Tech Homecoming!



Taking command of the rock wall with my university seminar class!

02/09/2014 EDC125

AWESOME

Very engaging professor and really made the progressive approach to teaching come alive... Already have ideas for a future classroom for her. She will keep you engaged! LOVE HER!! She's my favorite professor so far at Tech. I look forward to taking other classes with her whenever possible! I recommend her above any other professor for EDC 125.

Feedback shared to World Take Action 1/11 Grade Released: 1/11

You are the best teacher in the world. You have really made a big impact in my life because you refer to me and you treat me in a very special way. You always make me feel like I can do anything because you have high expectations for me. You make me feel so special because you believe in me. I just want to say Thank You So Much! Thank you for everything that you have done for me. I hope to one day become a Great Teacher like you are.

I LOVE this class! It has definitely been the one thing I have looked forward to each week. You have been so encouraging and helpful to me. Thank you so much for being the person who has finally showed me how to teach math! It is because of you that I have been able to be an encouragement to the other teachers at my school, especially during the change in curriculum with Common Core. I will definitely miss your class. Thanks again!

-Mallory Cox

I wasn't absolutely sure that I wanted to be a teacher UNTIL I started taking this class. Dr. Nielson showed me what being a good amazing teacher is about, not by "introducing" us to Education, but by actually being one! I honestly have no negative comment about the class or the instructor. I really appreciate all that she does for her students.

Good comments:

- loved that we were made to have deadlines for our work that was due on taskstream throughout the quarter.
- loved the enthusiasm from instructor
- loved her interest, humor, & passion
- best teacher I have ever had.

Fantastic class! By far the most helpful and practical class I have taken in my 5 years at Louisiana Tech. Keep up the good thinking, and good work!

