Dena K. Harshbarger

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### Education

**Doctor of Philosophy in Educational Studies 2015**

Specialization in *Teaching, Learning, & Curriculum*

University of Nebraska Lincoln **-** Lincoln, NE

Admitted to Candidacy: November 2010

**Master of Arts in Education 1998**

Emphasis in *Elementary Education*

University of Nebraska Kearney - Kearney, NE

**Bachelor of Science in Education 1992**

Emphasis in *Elementary Education*

Emphasis in *Middle School Math and Science*

University of Nebraska Kearney - Kearney, NE

# Professional Teaching Credentials

 **Nebraska Professional Teaching Certificate K-8** **2018**

# Professional Experience

**University of Nebraska Kearney** (2010-present)

 Associate Professor, Teacher Education Department (Fall 2018-present)

Assistant Professor, Teacher Education Department (Fall 2011-Fall 2018)

Lecturer, Teacher Education Department (Fall 2010-Summer 2011)

**University-Level Teaching Experience**

**Graduate:**

TE 816A Graduate-level Practicum in Education

TE 803 Philosophy of Education course

TE 828 Infusing STEM in the K-8 Classroom

TE 853D Improvement of Elementary and Middle School Science Instruction

TE 854 Content Area Reading

**Undergraduate:**

TE 313-01 and TE 313-02 Math Methods II Field Experience Observations

TE 318 Classroom Management and Assessment

TE 331 Intermediate Literacy

TE 351 Reading in the Content Areas

TE 353 Elementary Science Methods

TE 354 Elementary Social Studies and Science Field Experience

TE 473 Field Experience in Middle Level Classrooms

TE 400 Student Teaching Supervision

**Additional Teaching Experience**

**Meadowlark Elementary, Kearney Public Schools (**1995-2010)

* Elementary Teacher
* Active member on many school and most district committees
* KPS Write Traits Facilitator and Trainer (K-5)

**University of Nebraska Kearney** (2002-2003; Summer 2010)

* Adjunct Instructor, Teacher Education Department

**Central Elementary, Kearney Public Schools** (1992-1995)

* Classroom Teacher
* Active member on many school and most district committees

 **Collegiate Assignments**

Promotion to Associate Professor 2018

Promotion to Assistant Professor 2011

Graduate Faculty Status 2016

Academic Advisor (TE Undergraduate) 2010-present

Graduate Faculty 2016-present

Graduate Council –TE Representative 2017-present

COE Graduate Assistant Coordinator 2017-present

## Other Relevant Professional Development Opportunities

* **Garden Tools for Corn Training -** IANR Science Literacy Initiative, UNL (April 27, 2021)
* **Cooperative Learning On-line Training**- *Adapting Kagan for Distance Learning: Creating Full Student Engagement Online* (August 18, 2020).
* **Cooperative Learning On-line Training**- Back to School: *Adapting Kagan for COVID-19* (July 30, 2020).
* **Attended STEM 20 Virtual Event** (July 27-30, 2020)
* **Attended National Association of Professional Development (NAPDS) Conference.** Jacksonville, FL (March 15-17, 2018)
* **Attended Nebraska Association of Teachers of Science & Nebraska Council of Teachers of Mathematics (NATS/NCTM) Conference.** Kearney, NE (September 21, 2018).
* **Attended Nebraska State Reading Association 45th Annual Conference.** Ramada Inn, Kearney, NE (February 24, 2018)
* **Attended Nebraska State Reading Association 44th Annual Conference.** Ramada Inn, Kearney, NE (February 24, 2017)
* **Attended National Council of Teachers of Mathematics (NCTM)/Nebraska Association of Teachers of Science (NATS) “Mixing It Up in 2017”** **Conference.** Younes Center, Kearney, NE (September 8, 2017)
* **Training to become a Project Learning Tree, Project WET, & Project WILD facilitator.** Pioneers Park Nature Center, Lincoln, NE (June 28-29, 2017)
* **Visited Westridge Middle School’s STEM science lab.** (October 9, 2015)

Grand Island, NE

* **Kappa Delta Pi: 50th Biennial Convocation.** Orlando, FL **(**Oct. 22-23, 2015)
* **Education Advisory Board Training** (Sept. 22, 2015)

University of Nebraska Kearney

* **National Conference on Science Education**, (March 12-14, 2015)

Chicago, IL

* **NE State Reading Association Conference** (Feb. 25, 2015)

Kearney, NE

* **National Network for Educational Renewal Summer Symposium (**July 14-17, 2014)

Seattle, WA

* **eCampus Faculty On-Line Training** (May 21-June 24, 2014)

University of Nebraska Kearney

* **Collaborative Institutional Training Initiative (CITI)** (July, 2014)

University of Nebraska Kearney

* **MacBook and iBook Creation Workshop** (February 6-7, 2014)

University of Nebraska Kearney

* **Differentiated InstructionSymposia (**Nov. 15, 2013 & Jan. 9, 2014)

University of Nebraska Kearney

* **National Network for Educational Renewal 2012 Annual Conference (**Oct. 18-19, 2012)

Denver, CO

* **Educational Bird Banding Station (**September 21, 2012)

Ian Nicolson Audubon Center at Rowe Sanctuary, Gibbon, NE

* ***Bridging Cultures between Home and School***(November 10, 2011)

University of Nebraska Kearney

* **NATS 2011 Fall Conference**(Friday, September 30, 2011)

Fremont, NE

* **Popcorn Technology Sessions**(Fall 2011-2013)

University of Nebraska Kearney

* **Quantum Learning Inservice** (August, 2011)

Educational Service Unit 10, Kearney, NE

* **Differentiated Instruction- Sandra Paige (**Apr. 8, Oct. 21, 2010; Mar. 29, 2011)

University of Nebraska Kearney

* **Differentiated Instruction for English Language Learners Book Study** (Fall, 2010)

University of Nebraska Kearney

#### SCHOLARSHIP

#### Refereed Publications:

**Harshbarger, D.** & Vu, P. (2020). Virtual Learning During a Pandemic: Using Technology to Provide & Launch Interactive and Experiential Learning Opportunities for Preservice Teachers. *International Journal of Technologies in Higher Education. 17*(3), 7-16.

**Harshbarger, D.** (September, 2019). " Lightbulb" Moments for All Learners. *Science and*

 *Children*, *57*(2), 49-55.

Vu, P., **Harshbarger, D.,** Crow, S., & Henderson, S. (January, 2019). Why STEM? Factors

 that Influence Gifted Students’ Choice of College Majors. *International Journal of*

 *Technology in Education and Science*, *3*(2), 63-71.

**Harshbarger, D**., & Wiechmann, J. (Accepted April, 2019). A Thrilling Rollercoaster Ride:

 The Ups and Downs of Learning Force and Motion-A 5th Grade Learning

 Progression, S*cience and Children*.

**Harshbarger, D.** & Strawhecker, J. (Fall 2018). Implementing win-win math & science field experiences. *PDS Partners: Bridging Research and Practice is a peer- reviewed publication of NAPDS* 13(4), p. 23-27.

Kracl, C. & **Harshbarger, D. K.** (July, 2017). Using Literature and High-Level

Thinking Questions to Enhance Science Instruction.*Science and Children.*

*http://static.nsta.org/files/sc1709\_78.pdf*

#### Harshbarger, D. (September, 2016). Remaking Science Fairs. *Science and*

#### *Children, 54*(1); p. 38-45.

#### <http://digital.nsta.org/publication/?i=328065&ver=html5&p=40>

Knoell, C. M., **Harshbarger, D.**, Kracl, C., & Crow, S. R. (2015). Do you think like a

fifth-grader? Exploring the teacher characteristics of importance to

students from two diverse elementary schools in a rural Midwestern

community. *International journal of psychology: a biopsychosocial*

*approach, 2015, [Vol.] 17, p. 39-56*.

Kracl, C. L., Knoell, C. M., **Harshbarger, D. K**., Strawhecker, J. E. (2014). Win-win field

experiences in our partner schools. Education in a democracy: *A journal of the*

*national network of educational renewal,* 6 (pp. 33-46).

*hwww.nnerpartnerships.org/communications/nner-journal/*

Lewis, E., Dema, O., & **Harshbarger, D.** (2014). Preparation for practice: Elementary

preservice teachers learning and using scientific classroom discourse community

instructional strategies. *School Science and Mathematics*, *114*(4), 154-165.

#### Lynott, F., Kracl, C., Knoell, C., & Harshbarger, D.(2013). Using the Shared

#### Integration Approach: A More “Authentic Approach” to Middle School

#### Interdisciplinary Lessons in Health, Mathematics, Science & Literature,

#### *Strategies/American Alliance for Health Physical Education Recreation*

#### *and Dance 26(3), pp. 13-18;* <http://www.aahperd.org>.

Vu, P., Crowe, S., Henderson, S., & **Harshbarger, D.** (January, 2019). Gifted/talented

students’ choice of college STEM majors. I*nternational Journal of Technology in Education and Science (IJTES)*; 3(2) p. 63-71. <https://ijtes.net/index.php/ijtes/issue/view/4>

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**Article Submitted:**

* **Harshbarger, D.,** & Vu, P. (Jan. 5, 2020). Using Gamification Systems to "Playfully" Assess Science. *Science and Children.*

**Grants**

* **Harshbarger, D.**, Vu, P., Meyers, D., Lazarova, M. (2017-2018). *Using Hands-on Technology to Energize Elementary Teachers’ Physics Instruction.* Nebraska Coordinating Commission for Postsecondary Education Improving Teacher Quality: State Grants Program.

**Grant Submitted & Reviewed –Preparing for Future Submissions**

* Thompson, P., **Harshbarger, D.,** Strawhecker, J., & (Spring, 2021). *A Head Start on STEM. (Science, Technology, Engineering, & Math)*. Women in Nebraska (WIN) Grant.
* **Harshbarger, D.,** Strawhecker, J., & Thompson, P. (Summer, 2019). *Planting the Seeds for PK Learning: Making STEM Count.* Women in Nebraska (WIN) Grant-Finalist.
* **Harshbarger, D.**, Vu, P., Carlson, K., Darveau, S. A., Moser, A., Nebesniak, A., Schaffer, J., & Trantham, K. W. (April 30, 2018). *National Science Foundation* (NSF). Proposal 1836443 submitted: Growing Teacher Candidates' Understanding of STEM Instruction at the Undergraduate Level.

**Other Publications**

* **Harshbarger, D. K.** (2015). Exploring preservice teachers' perceptions of differentiated science instruction. (Doctoral dissertation)

 -Digital Commons@University of Nebraska-Lincoln

**Work in Progress**

* **Harshbarger, D.** & Kracl, C. (Work in Progress). Little Things that Make a BIG Difference. Kappa Delta Pi.

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#### Presentations

**National Presentations**

**Harshbarger, D.** & Strawhecker, J. (March 16, 2018). Implementing Win-Win Math and Science

Field Experiences. *National Association for Professional Development Schools. PDS 2.0: Defining our Work for the Next Generation.* Jacksonville, FL. (competitively selected).

Kracl, C., Richeson, A., & **Harshbarger, D**. (February 22, 2018).Open the Book to Infinite

 Possibilities with Student Engagement in Reading*. Nebraska State Reading Association*

 *45th Annual Conference: Literacy and its infinite possibilities.* Ramada Inn, Kearney NE.

 (competitively selected).

Kracl, C. & **Harshbarger, D**. (October 12, 2017).There's always time to read aloud: Validating

 why we read aloud or reminding us why we should. *Nebraska Library*

*Association/Nebraska School Library Association Joint Conference:* *Providing Access to the Good Life in All.* Younes Center, Kearney, NE. (competitively selected).

**Harshbarger, D.** & Strawhecker, J., (2015, October 23). Inquiry–Based Learning for

 Elementary Science and Math. *Kappa Delta Pi: 50th Biennial Convocation,*

Orlando, FL. (competitively selected).

Kracl, C., Strawhecker, J., & **Harshbarger, D.** (2013, October 10).Win-Win K-5 Field

 Experiences: Education Methods Courses. *NNER Community Engagement to*

 *Enhance Student Learning,* Albuquerque, NM. (competitively selected).

Knoell, C., Kracl, C., & **Harshbarger, D.** (2012, October, 19).From Kindergarten to

 College: The Perspectives of Three, “Grow-Your-Own” Professors. *Simultaneous*

 *Renewal: Everyone Teaches, Everyone Learns,* Denver, CO. (competitively

 selected).

Knoell, C., Kracl, C., & **Harshbarger, D.** (2012, October, 19).Living, Loving, and Learning:

 Elementary Classroom-based Field Experiences. *Simultaneous Renewal:*

 *Everyone Teaches, Everyone Learns,* Denver, CO. (competitively selected).

Strawhecker, J., Kracl, C., & **Harshbarger, D.** (2012, March 9).UNK’s Commitment to

 Consistency. *Professional Development Schools National Conference,* Las Vegas,

 NV. (competitively selected).

**State Presentations:**

**Harshbarger, D.** & Laden, S. (Sept. 19, 2019). Stress-Free Inquiry. *NATM/NATS Conference.*

Younes Conference Center, Kearney, NE. (competitively selected).

Kracl, C. & **Harshbarger, D.** (Feb. 20, 2019). Little Things that Make a BIG Difference. *NSLA*

 *Reading Conference.* Younes Conference Center, Kearney, NE. (competitively selected).

**Harshbarger, D.** (Oct. 18, 2019). Budding Scientists: Using STEM with PK-3 Learners. UNK Early

 Childhood Conference-Promoting Wellbeing or Children and Families. UNK, Kearney,

 NE (competitively selected).

**Harshbarger, D.** & Knoell, C. (September 21, 2018). Using picture books to launch STEM lessons.

 Nebraska Association of Teachers of Science & Nebraska Council of Teachers of

 Mathematics (NATS/NCTM) Conference**.** Kearney, NE.

Kracl, C., **Harshbarger, D.,** Strawhecker, J. (2017, February 24). There's Always Time for A

 Read Aloud*. Nebraska State Reading Association 44th Annual Conference* (invited).

Kracl, C., **Harshbarger, D.,** & Siegal, M. (2016, February 26).Motivating Students to

 Read, *Nebraska State Reading Association (NSRA) Conference;* Kearney, NE.

 (invited).

**Harshbarger, D.** (2010, September 20). Nature’s Paint Chips, *National Association of*

 *Teaching Mathematics Conference;* Ramada Inn, Kearney, NE. (accepted)

**Local Presentations:**

**Harshbarger, D.** (2018, October 19). *Using STEM with PK-3 Learners.* UNK Community Early

 ChildhoodConference: Promoting Wellbeing for Children and Families. Kearney, NE

 (competitively selected)

Kracl, C. & **Harshbarger, D.,** (2017, October 12). *There's Always Time for A*

 *Read Aloud.* School Librarians’ Conference. Kearney, NE (invited)

**Harshbarger, D.** (2017, September 22). *Budding Scientists: Using STEM with PK-3 Learners.*

UNK Community Early ChildhoodConference: Promoting Wellbeing for Children and

 Families. Kearney, NE (competitively selected)

Kracl, C., **Harshbarger, D.,** Strawhecker, J. (2017, February 24). *There's Always Time for A*

 *Read Aloud.* Nebraska State Reading Association 44th Annual Conference (invited).

**Harshbarger, D.,** Coy, C., & Duff, J.(2016, September 20).Cooperative Learning and

 High Engagement Strategies. *Educators Rising UNK Expo*, UNK Student Union,

 Kearney, NE (invited).

**Harshbarger, D.** (2015, January 6-7). *Write Trait Training* at Educational Service Unit 10;

 Kearney, NE. (invited).

**Harshbarger, D.** (2012, June 12).Using iPads to Enhance Inquiry-based Science, *UNL*

 *Tech Edge Conference,* Lincoln, NE. (invited).

### SERVICE

**State:**

* Nebraska Department of Education Science Standards Team Aug, 2016-present

**University:**

* STEM Grant Planning –NU Systems Science Grant Fall 2018
* Forum with UNK Lobbying Firm for NE University System October 9, 2018
* Reviewed Undergraduate Research Projects February, 2018
* COE Representative for UNK Graduate Council Aug, 2017-May, 2020
* *UNK Early Awareness Day* for 4th Graders Oct. 2014-2018
* Reviewed UNK’s Biology Annual Program March, 2016
* Hosted International Student in TE 353/354 Aug.-Sept, 2015

#### UNK Program and Curriculum Development

* Harshbarger (Fall, 2018). Distance Education Stipend to develop TE 828 Infusing STEM in the K-8 Classroom. To be taught in spring or summer of 2019.
* Vu & Harshbarger (2017). Curriculum & Instruction: 24 credit hour STEM concentration
* Vu & Harshbarger (2017). New Course: TE 828 Infusing STEM in the K-8 Classroom.

**Department:**

* Assessment Committee March, 2021-present
* Graduate Faculty Committee Fall, 2020-present
* Leadership Advisory Committee Fall, 2020-present
* Teacher Scholar’s Academy Interview Committee Spring, 2020 & 2021
* Search Committee for TE full-time lecturer Summer, 2019
* Search Committee for Health and PE Department Fall 2018
* Presentation on Differentiated Instruction for Faculty August, 2018
* Search Committee Chair for TE ELED Lecturer Position May, 2018
* UNK EPP Accreditation On-Site Visit Jan. 28-29, 2018
* Educator’s Rising Conference –Welcome & Session Nov. 2017, 2018
* Differentiation/Inclusion Certification for C& I Program Nov. 2017-present
* Search Committee Chair for Graduate Assistants April & Nov. 2018
* C & I STEM Concentration Committee Co-Chair Aug. 2016-2017
* TE Graduate Faculty Committee 2017-present
* TE Graduate Assistant Coordinator 2017-present
* Co-Chair for COE STEM Graduate Program Committee Fall, 2016-2018
* COE CAEP Committee Summer, 2016
* Presented at the TE Awards Ceremony April 29, 2016
* Presented Awards at the COE Honors Ceremony 2014, 2016-18
* Facilitated at CAEP P-16 Partner Input Gathering April 2, 2016
* Served on CAEP Standard 2 Committee Spring, 2016
* Compiled data for Level 3 field experiences: CAEP March-April, 2016
* Represented UNK at State Educators Rising Conference Feb. 25, 2016
* “Welcome to Fall Semester” Greeter in COE Jan & Aug 2015-present
* Co-Sponsor for Kappa Delta Pi Honorary Education Society; Eta Phi Chapter, UNK 2014-present
* Mentored Undergraduate Research Project Spring 2015
* Student Union Majors Fair: Represented COE Faculty Sept. 17, 2014
* UNK Campus Visits Sept. 17 & 29, 2014
* Transfer Days May and June, 2014
* Served on *Candidate Search Committee for Elementary*

*Social Studies Methods Instructor* Summer 2012

* Substitute at Horizon Middle School for UNK Student Teaching Seminar Sept & Jan, 2014-16
* COE Undergraduate Advising Fall 2011-present
* COE Professional Development Team 2011-present
	+ Popcorn Technology Presentations Oct. 11, 2011
	+ Brown Bag Luncheon Presentation April 15, 2011
* COE Professional Development Research Committee Fall 2011-Spr 2012
* TE351/352/353/354 Planning Partner Fall, 2010-present
* Partner with HYPERLS for UNK Fitness Day Sept, 2010-present

#### Directed Student Learning

* Facilitated numerous TE 353 Honors Projects (2011-present)
* Undergrad Goodfellow Supervised Research - Anna Wagemann Fall 2015-2016
* Undergrad Goodfellow Supervised Research - Elizabeth Grenon Fall 2017-2018
* Poster presentation at NAPDS Conference, Jacksonville, FL
* Undergrad Goodfellow Supervised Research – Beth Hawney Fall 2018-2019
* Summer Student Research Program (SSRP)-Sarah Laden Summer 2019
* Summer Student Research Program (SSRP)- Ashley Pachta Summer 2020
* Undergrad Goodfellow Supervised Research – Shelby Nichols Spring 2021

**Community & Consultation:**

Offering support & professional development to KPS K-5 teachers with new science curriculum.

* Meeting with Jason Mundorf 2018-2019

Helping to plan and facilitate STEM Day for Buffalo Hills Elementary School, Kearney, NE.

* Working with Mary Dubas Oct. 2018-present

Helping to plan and facilitate 1st Grade STEM days for KPS, Kearney, NE.

* Working with Michelle Fouts, Bryant Elementary August, 2018-present

Brainstorming for KPS Solar Eclipse August, 2016-2017

Differentiated Instruction Professional Development for Red Cloud, NE April, 2014

ESU 10: Annual Science Olympiad & Invention Convention (Dianah Steinbrink)

* TE 353 Students assist and facilitate 2015-present

Guest Reader at Northeast Elementary School Feb. 20, 2017

Coordinate Annual KPS 2nd Grade Outdoor Education Days

* Provide learning activities for 400+ students April, 2014-present

Rowe Sanctuary & Audubon Center Education Committee 2015-2016

Guest Teacher at Meadowlark Elementary, 2nd Grade:

* *Float Your Boat Investigation* July 29, 2015

Consultant for KPS Science Advisory Committee 2011

Consultation-UNK Network Partnership - Kenwood Elementary

* *Differentiated Writing Instruction* 2010-2011

### Recognition

* Pratt-Heins Teaching Award August, 2021
* Received Kappa Delta Pi Membership Chapter Program Award

 -KDP Convocation, Indianapolis, IN Nov. 2, 2018

* Nominated for UNK’s Community Service Program of the Year

 -TE 354’s 5th Grade Science Fair at Central Elementary School April 26, 2017

* Received Kappa Delta Pi Recruitment Award

 -50th Biennial Convocation, Orlando, FL Oct. 23, 2015

* Received UNK Outstanding Teaching Award 2012- 2013
* Mortar Board Annual Faculty Recognition Dinner Nov. 2010-11
* Academy for Teacher Education Excellence at UNK Inductee May, 2009

#### Selected Affiliations

* National Science Teachers Association 2010-present
* Nebraska Science Association for Teachers 2016-present
* Kappa Delta Pi Honorary Society 1990-92; 2014-present
* Nebraska State Reading Association 2010-present