# Rayya Younes

## Radford University

ryounes@radford.edu, 979-219-9112

Education		
Ph. D	Mathematics Education, Certificate: Advanced Research Methods Certificate Texas A&M University, College Station, TX Co-Chairs: Dr. Bruce Thompson, and Dr. Yeping Li	May 2013
M.S	Mathematics American University of Beirut, Beirut, Lebanon Thesis: Quadratic Forms: Local-Global Theorem Advisor: Dr. Kamal Khuri-Makdisi	February 2007
B.A	Mathematics Graduated with Distinction Certificate: Teaching Diploma, Teaching Mathematics in Secondary School American University of Beirut, Beirut, Lebanon	June 2003

# Professional Experience \_

#### Aug 2013 – Present **Assistant Professor**

School of Teacher Education and Leadership, Radford University

- Taught elementary methods, Middle school methods, Educational Research (online)
- Observed, elementary, middle, and high school preservice teachers in the field
- Initiated and organized the Connecting Mathematical Practices conference at Radford University

# Jan 2014 – August 2015

# **Interim Coordinator of the Masters in Mathematics Education Program**

School of Teacher Education and Leadership, Radford University

• Managed the program including recruitment, budget, hiring, accreditation and program evaluation reports, advised over 60 students per semester

#### 2011 - 2013 Instructor (Graduate Teaching Assistant)

Dept. of Teaching, Learning, and Culture, Texas A&M University

- Taught TEFB 412: Elementary Mathematics Methods course for seniors
- Supervised elementary preservice teachers in the field

#### 2010 -2013 **STEM Summer Camp Director**

Aggie-STEM Center, Texas A&M University

- Started and directed the camp which focused on STEM subjects for high school students for 4 years
- The camp started with 36 students the first year and was up to 120 students my last year. Now the camp has 4 sessions and more than 240 students using the same model I created.
- Designed and taught a Number Theory course
- Planned the schedule
- Hired staff
- Organized the activities
- Created and operated the budget

### Jan 2011 - Aug

2011

#### **Graduate Assistant**

Office of the VP for Diversity, Texas A&M University

- Collected university demographics data for students, faculty, and staff
- Tabulated and organized the data to be displayed on the website
- Compared the data to other universities

#### 2009 - 2011 Graduate Assistant

Aggie-STEM Center, Texas A&M University

- Provided professional development on STEM PBL
- Researched the impact of STEM Project Based Learning on student achievement scores

#### 2003 - 2005 Graduate Assistant

Mathematics Department, American University of Beirut

#### 2004-2009 Mathematics Teacher

International College (IC), Ain Aar, Lebanon and Antonine Sisters School, Ghazir, Lebanon

• Taught Mathematics to grades 6,7,8, and 10

#### 2006 - 2009 Volleyball Coach

International College (IC), Ain Aar, Lebanon and Antonine Sisters School, Ghazir, Lebanon

Awards and Recognitions		
2015	Outstanding Local Advisor Award -SVEA	
2013	Distinguished Graduate Award	
2012	Dean's Award for Outstanding Graduate Student Research Paper	
2011	Service Award for STEM education (Texas A&M University)	
2003	Muhanna Award for excellence in Math (American University of Beirut)  The Muhanna Award of Excellence is awarded to the most outstanding senior student in the Department of Mathematics at the American University of Beirut.	

#### Publications

- Erdogan, N., Navruz, B., **Younes, R.**, & Capraro, R. M. (2016). Viewing STEM PBL influence on student science learning through the implementation lens: Latent growth modeling. Eurasia Journal of Mathematics, Science and Technology Education, 12(8), 2139-2154. DOI: 10.12973/eurasia.2016.1294a
- Capraro, R. M., Capraro, M. M., Morgan, J., Scheurich, J., Jones, M., Morgan, J., Huggins, K., Corlu, S. M., **Younes, R.**, & <u>Han, S. Y.</u> (2016). The impact of sustained professional development in STEM in a diverse urban district. *Journal of Educational Research*, *109*(2), 1181-196. <a href="http://dx.doi.org/10.1080/00220671.2014.936997">http://dx.doi.org/10.1080/00220671.2014.936997</a>
- Zientek, L. R., Younes, R., Nimon, K., Thompson, B., Mittag, K. C., & Taylor, S. (2013).

  Fractions as a foundation for algebra within a sample of prospective teachers. *Research in the Schools*, 20(1),76-96.
- PS: This paper was published in MAY 2014 but has a 2013 date because the journal is behind on publications
- Capraro, R. M., Capraro, M. M., **Younes, R**., Han, S. Y., & Garner, K., (2012). Changes in equality problem types across four decades in four second and sixth grade textbook series. *Journal of Mathematics Education*, *5*, 166-186.

- **Younes, R.G.,** Manizade, A., (2016, March). *Using Technology to Teach Geometry and Measurement*. Session presented at the annual meeting of the Virginia Council of Teachers of Mathematics, Stafford, VA.
- Manizade, A., **Younes, R.G.** (2016, March). Writing an Article Based on Your Own Teaching: Why and How? Session presented at the annual meeting of the Virginia Council of Teachers of Mathematics, Stafford, VA.
- **Younes, R. G.,** Park, B., Bays, D., Klein, R., Weinberg, J., (2016, February). *Primary Grade Students' Mathematics Learning: Money Talks? Money Teaches!* Paper presented at the 39<sup>th</sup> annual meeting of the Eastern Educational Research Association, Hilton Head, SC.
- **Younes, R. G.,** Fong, C.J., Zientek, L.R. (2016, February). *Mathematics Achievement by SES in Schools in the United States: Trends and Predictions*. Paper presented at the 39<sup>th</sup> annual meeting of the Southwest Educational Research Association, New Orleans, LA.
- **Younes, R. G.,** Fong, C.J., Zientek, L.R. (2015, February) *Gender and Ethnic Differences in U.S. Students' Mathematics Achievement and Beliefs: Results from TIMSS 2011.* Paper presented at the 38<sup>th</sup> annual meeting of the Southwest Educational Research Association, San Antonio, TX.
- Manizade, A.G., Jacobsen, L., **Younes, R**., (2014, October). *Creating Patterns and Describing Them Algebraically*. Session presented at the Annual Mathematics Day, Williamsburg, VA.
- **Younes, R. G.**, & Navruz, B. (2014, February). *A Deeper Examination of the U.S. Students'*Performance in TIMSS 2011. Paper presented at the 37<sup>th</sup> annual meeting of the Southwest Educational Research Association, New Orleans, LA.
- **Younes, R. G.**, Jones, M. M., Erdogan, N., Navruz, B., & Capraro, R. M. (2013, February). *A Longitudinal Study: The impact of STEM PBL on Students' Science Achievement*. Paper presented at the 36<sup>th</sup> annual meeting of the Southwest Educational Research Association, San Antonio, TX.
- **Younes, R. G.,** Nite, S., & Rangel, A. F. (2012, February). The effects of sustained professional development in STEM project based learning: Results from one Texas school district. Paper presented at the 35<sup>th</sup> annual meeting of the Southwest Educational Research Association, New Orleans, LA.
- **Younes, R. G.** & Capraro, R. M. (2011, November). *The impact of STEM PBL on women's scores, retention, and course choice*. Paper presented at the annual meeting of the School Science and Mathematics Association, Colorado Springs, CO.
- Capraro, R. M., Scheurich, J., Morgan, J., Avery, R., Yakman, G., Corlu, S. M., Capraro, M. M., Han, S., **Younes, R.,** & Huggins, K. (2011, April). *Building STEM centers for excellence in educational innovation*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- **Younes, R. G.** (2011, March). *Does project based learning help women perform better in STEM subjects?* Paper presented at Student Research Week, College Station, TX.

- Capraro, R.M., Capraro, M.M., **Younes, R.,** Han, S.Y. (2011, February). *Propensity score matching reveals differences in sustained professional development*. Paper presented at the 34<sup>rd</sup> annual meeting of the Southwest Educational Research Association, San Antonio, TX.
- **Younes, R. G.** (2011, February). *Repeated measures*. Paper presented at the 34<sup>rd</sup> annual meeting of the Southwest Educational Research Association, San Antonio, TX.
- **Younes, R. G.** (2011, February). *An Introduction to the three types of suppressor variables: Traditional, negative, and reciprocal.* Paper presented at the 34<sup>rd</sup> annual meeting of the Southwest Educational Research Association, San Antonio, TX.
- Capraro, R. M., Capraro, M. M., Corlu, S. M., **Younes, R.**, Han, S. Y., & Morgan, J. (2010, November) *The impact of sustained professional development in STEM project based learning on district outcome measures*. Paper presented at the annual meeting of the School Science and Mathematics Association, Fort Meyers, FL.
- Capraro, R. M., Capraro, M. M., **Younes, R.,** & Han, S. Y. (2010, November). *A longitudinal look at the equal sign through the lens of textbook authors*. Paper presented at the annual meeting of the School Science and Mathematics Association, Fort Meyers, FL.
- Capraro, R. M., Capraro, M. M., **Younes, R.**, Han, S. Y., Garner, K., (2010, February). *A meta-analysis of relational symbols in K-12 textbooks*. Paper presented at the 33<sup>rd</sup> annual meeting of the Southwest Educational Research Association, New Orleans, LA.

#### Grants and External Funding

#### 2015-2018 Mathematics and Science Partnership grant

Galeshi, Roofia (Principal), Manizade, Agida G (Co-Principal), Jacobsen, Laura J (Co-Principal), Younes, Rayya (Co-Principal) Awarded 728,598 for three years from VDOE

2015 Studying the Process: Can Discussion and Collaborative Writing Lead to Valid and Reliable Rubrics?

Wall-Bortz, Whitney W (Principal), Younes, Rayya (Co-Principal), Daniel, Leslie S (Co-Principal), Colley, Kenna M (Co-Principal), Gilbert, Sharon L (Co-Principal), Dore, Elizabeth D (Co-Principal), Gustafson, Glenna S (Co-Principal), McDonel, Jennifer S. (Co-Principal), Awarded \$10,000 from CEHD at Radford University

2015 Primary Grade Students' Math Learning: Money Talks? Money Teaches!"

Park, Boyoung (Principal), Younes, Rayya (Co-Principal), Bays, Debora A, (Co-Principal),

Currently under review - \$ 4220 – **Not Funded** 

2011-2013 Energized for STEM Academy Inc. *Aggie STEM Summer Camp*. Director. Awarded \$136,000 Private Corporate Funding.

Co-Director. Awarded \$103,000 Private Corporate Funding.

Conferences (Started and organized by me)

#### **Connecting Mathematical Practices Conference**

Started the conference in May 2015. The conference is one of the very few in the state that are geared towards secondary mathematics teachers. Presentations focus on practices that have been successful in the classroom.

#### **Self-Care and Stress Management Conference**

Started the conference based on the need of preservice teachers. The conference's aim was to help these preservice teachers juggle field placements with classes, assignments and life.

### **Professional Development** (presented by me to teachers)

2010	Non Newtonian Fluids, Introduction to Project Based Learning. Hearne ISD mathematics and science teachers
2010	Dilution PBL and How to Design a Project Based Learning Activity Hearne ISD mathematics and science teachers

Service				
2014 – Present	Associate Editor – Virginia Mathematics Teacher			
2013 – Present	SVEA(Student Virginia Education Association) faculty advisor for the Radford University chapter			
2015 – Present	Reviewer for the Virginia Mathematics Teacher			
2014	Guest reviewer for Education Practice and Reform Journal			
2010 – Present	Reviewer for Southwest Educational Research Association Conference			

#### Committee work:

- Chaired and served on several search committees
- Serving on the departmental committee updating the Faculty Annual Review criteria
- Serving on the Department Steering Committee
- Serving on the University Committee for international students

#### Recruitment and Orientation:

- Met with several high school students that plan on becoming teachers
- Presented at the Induction ceremonies for pre-service teachers about professionalism
- Participated in several orientation sessions

# **Professional Associations**

- School Science and Mathematics Association (SSMA) (member)
- Southwest Educational Research Association (SERA) (member)
- National Council of Teachers of Mathematics (NCTM) (member)
- Virginia Council of Teachers of Mathematics (VCTM) (Journal associate editor)
- America Association of Colleges for Teacher Education (member)
- Eastern Educational Research Association (EERA) (member)