

V TALLER INTERNACIONAL

TENDENCIAS EN LA EDUCACIÓN MATEMÁTICA BASADA EN LA INVESTIGACIÓN

Fifth International Workshop Trends in Research-Based Mathematics Education

Del 14 al 17 de noviembre de 2018

Currículum vítae de conferencistas y talleristas

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Christine Joseph Picot, PhD University of South Florida, Tampa, FL

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Academic Degrees

Ph.D., 2012 (Dec) University of South Florida, Tampa, FL

Curriculum and Instruction: Specialization in Childhood Education Literacy Studies - Cognate in Elementary Mathematics Education Dissertation: Assessing the Process Strand of Communication in

Mathematics: An Examination of Prompts Eliciting Written Responses in

Mathematics Textbooks

M.A., 2003 University of South Florida, Tampa FL

Elementary Education/Emphasis in Mathematics and Science

B.A., 1996 University of South Florida, St. Petersburg, FL

Elementary Education

Academic Experience

Visiting Teaching Instructor, University of South Florida, Tampa, FL (August, 2018 - Present)

Assistant Professor, East Carolina University, Greenville, NC (August, 2015 - 2018)

Online/Face to Face Adjunct Instructor for Graduate Level Students, University of South Florida, Tampa, FL

(January, 2013 - June, 2015)

Fact to Face Adjunct Instructor for Undergraduate Level Student, St. Petersburg College, St. Petersburg, FL

(January 2013 – June 2015)

Instructional District Level Mathematics/Science Coach, Pinellas County Schools, Clearwater, FL

(May 2004 - May, 2015)

Elementary Classroom Teacher (Title One, ESOL) (May 1996 – May 2004)

Courses Taught

Teaching Instructor, University of South Florida, Fall 2018 - Present

LAE 4424	Teaching Children's Literature
LEA 6427	Children's Literature
RED 4724	Intermediate Literacy I
RED 6316	Emergent Literacy

Assistant Professor, East Carolina University, Fall 2017 – Present

ELEM6408 Summer2 Collaborating, Teaming, Leading

ELEM 3200 Language Arts in Elem School (face-to-face) – Disciplinary Literacy Focus - Mathematics

ELEM 3300 K-2 Practicum (face-to-face)

ELEM 2123 Early Experience for the Prospective Teacher (face-to-face)

Assistant Professor, East Carolina University, Fall 2016 – Spring 2017

ELEM 3200 Language Arts in Elem School (face-to-face) - Disciplinary Literacy Focus - Mathematics

ELEM 3300 K-2 Practicum (face-to-face)

Assistant Professor, East Carolina University, Fall 2015 – Spring 2016

ELEM 4324 Fall Internship in Elem School

ELEM 3200 Language Arts in Elementary School (*on-line*) – *Disciplinary Literacy Focus - Mathematics*

Other Teaching Activities:

Innovations in Course Content / Presentation

2017-2018 - SAMR Technology Implementation

2015-2018 - Interdisciplinary Module – Modeling Eliciting Activities (Mathematics Literacy focus)

2016-2018 - K-2 Practicum Assessment Resource Module – Writing

2015-2018 - Vocabulary Module – Assessment and Interdisciplinary Language (Mathematics Literacy Focus)

2015-2017 - Poetry Connection to Real World - Extreme Poetry and University Issues

Other Teaching Activities

2015 - 2018- Response Journaling in Content Area (Mathematics Literacy Focus)

Grants:

2018 - Awarded - College of Education Global Partnership Grant.

Funding received to facilitate research in mathematics education for K-6 learners.

Intellectual Contributions:

Refereed Articles

Joseph Picot C. & Kozdras, D. (2017). "Digital Show and Tell: Using Technology to Capture Student Communication of Thinking During Mathematical Problem Solving," *Dimensions*. Mathematics/Literacy Focus

Joseph Picot, C. (2017). "Using Academic Word Lists to Support Disciplinary Literacy Development, *The Reading Teacher* – Mathematics/Literacy Focus

Kozdras, D., Joseph, C. M., & Schneider, J. J. (2015). Reading Games. *The Reading Teacher* – Literacy/Technology Focus

Book Chapters

Refereed

Kozdras, D., Joseph, C. M., & Kozdras, K. (2015). Cross-Cultural Affordances of Digital Storytelling: Results from cases. *Handbook of Research on Cross-Cultural Approach to Language and Literacy Development*. IGI Global.

Papers Under Review

Kozdras, D. & Joseph Picot, C. (2017). Digital Show and Tell as Formative Intervention: Bridging the Gap between Disciplinary Literacies. *Literacy Research: Theory, Method, and Practice* – Mathematics/Literacy Focus.

Joseph Picot, C. & Kozdras, D. (2017) The Problem with Word Problems: Going beyond the gradebook to modify mathematical misunderstandings.

Joseph Picot C., (2017). A Picture is Worth a Thousand Words: Utilizing visual representation to assess academic language acquisition in teacher education, College Teaching.

Working Papers

Joseph Picot C. & Schneider, J. (2017). A Framework for Analyzing Mathematics Writing Prompts in Textbooks, Journal for Research in Mathematics Education.

Joseph Picot, C (2018). Academic Word Lists: A revision for advancement in mathematics language learning. Targeted for RELC.

Joseph Picot, C. & Kozdras, D. (2018). Hidden Literacies in Stem Lesssons. Targeted for Journal of Reading Education.

Picot, C. M. & Schneider, J. (2018). "Number sense as a Constrained Skill," targeted for Journal for Research in Mathematics Education.

Presentation of Refereed Papers <u>International</u>

Joseph Picot, C. & Kozdras, D. (2018). *Digital Show and Tell: Digital Journaling with Interactive Whiteboard Apps for Formative Assessment*. Society for Information Technology and Teacher Education, Washington, DC.

Joseph, C. M. & Chittum, J. (2018). *Low Stakes Writing to Facilitate Higher Order Thinking*. Conference on Higher Education Pedagogy, Blacksburg, Virginia.

Joseph Picot, C. (November 2017) IV International Workshop (Trends in Research-based Mathematics Education). *A Framework for Vocabulary Analysis: A method for differentiation*. Cuarto Taller Internacional Tendencias en la Educacion Mathematica a Basada da en la Investigacion. Puebla, Mexico.

Joseph Picot, C. & Schneider, J. (November 2017) IV International Workshop (Trends in Research-based Mathematics Education). *Presenting an Instructional Resource Guide to Implement Writing through Problem Solving*. Cuarto Taller Internacional Tendencias en la Educacion Mathematica a Basada da en la Investigacion. Puebla, Mexico.

Joseph Picot, C. & Schneider, J. (May, 2017). Writing Prompts and Mathematics Textbooks. II International Conference on Mathematics Textbooks Research and Development (ICMT-2 2017), Rio de Janeiro, Brazil.

Kozdras, D. M., Joseph, C., & Schneider, J. (July, 2017). *Reading Games: Close Viewing and Guided Playing of Multimedia Texts*. Association of Literacy Educators and Researchers, Orlando, Florida.

Joseph, C. M. & Chittum, J. (2017). *Facilitating Metacognition and Critical Thinking in Your Course*. Conference on Higher Education Pedagogy, Blacksburg, Virginia.

Joseph, C. M. & Chittum, J. (2016). *Innovate, Integrate, Motivate: Presenting a Resource Guide to Implement Problem Solving in Your Course.* Conference on Higher Education Pedagogy, Blacksburg, Virginia.

National

Kozdras, D.M. & Joseph Picot, C. (Fall, 2017) *Hidden Literacies: Using Cultural Historical Activity Theory to Uncover Literacies as Meaningful Tools to Solve Real-World Interdisciplinary Problems*, Literacy Research Association, Orlando, FL

Joseph Picot, C. & Kozdras D. M. (Fall 2017) Digital Show and Tell: The Affordances of Multimedia Journals in Learning Disciplinary Language and Literacy, Literacy Research Association, Orlando, FL

Joseph, C. M. & Kozdras, D. (2016-2017). *Digital Show and Tell: Student use of whiteboard apps as formative assessment.* 15th Annual STEM Forum & Expo, hosted by NSTA, Denver, Colorado.

Regional

Joseph Picot, C & Kozdras, D.M. (Fall 2017). *Digital Show and Tell*, NCTM 2017 Regional Conference & Exposition, Orlando, FL.

Joseph, C. M. & Hutton, C. M. (2015-2016). *Integrating Literacy in Mathematics; Using Journaling as Authentic Assessment.* Mary Lois Stanton Reading and Language Arts Conference, Greenville, North Carolina.

State

Joseph, C. M. & Peoples, P. (2016-2017). 2016 NCCTM Conference Leaping Forward: Teaching & Learning, Equity, Curriculum, and Assessment. NCCTM Conference, Greensboro, North Carolina.

Joseph, C. M. & Hutton, C. (2016-2017). *Journaling as Authentic Assessment*. Florida Council of Teachers of Mathematics, Orlando, Florida.

Joseph, C. M. & Flory, J. H. (2015-2016). *Let's Get Moving: Integrating Movement into the Curriculum.* Spring 2016 Conference - The Collaborative, Morehead City, North Carolina.

Dr. Elena Naftaliev is a lecturer in the department of Mathematics, Achva Academic College, Israel. She is a director of "Alfa" - the project for clinic preparation of teachers for high school mathematics.

Elena worked many years as a developer of textbooks and software materials for learning and teaching mathematics and as a high school mathematics teacher in Israel and Russia.

She used innovative technologies during her teaching. Her research interests are concerned with the development of knowledge that occurs while processes of learning-teaching with interactive curriculum materials. Her focus is on the study of learning and teaching with interactive textbooks, semiotic functions of interactive text, role of examples, and design of interactive curriculum materials.

CV breve de Gustavo Martínez Sierra

El Dr. Gustavo Martínez Sierra es miembro del Sistema Nacional de Investigadores desde de 2004. Es Profesor-Investigador de la maestría y el doctorado en matemática educativa de la Facultad de Matemáticas de la Universidad Autónoma de Guerrero.

Estudió la licenciatura en Matemáticas en el Instituto Politécnico Nacional (ESFM-IPN) y la Maestría en Ciencias en el departamento de Matemática Educativa del Centro de Investigación y Estudios Avanzados (Cinvestav-IPN). Realizó sus estudios doctorales en el Programa de Matemática Educativa del Centro de Investigación en Ciencia Aplicada y Tecnología Avanzada del IPN (CICATA-IPN).

Su actividad de investigación se enmarca dentro del llamado "Dominio afectivo en matemática educativa" que comprende el estudio de las creencias, las emociones, las actitudes, los valores y la motivación de estudiantes y profesores hacia las matemáticas, su enseñanza y su aprendizaje. Además realiza estudios sobre el estudio de los procesos construcción de conocimiento matemático en diferentes niveles escolares..

Ha dirigido 2 tesis de doctorado, 19 tesis de maestría, 4 de licenciatura y actualmente dirige tres tesis de doctorado y cuatro de maestría. Ha publicado 14 artículos de investigación, 10 capítulos de libros y más de 30 artículos en resúmenes en extenso. Ha sido responsable de tres proyectos de investigación financiados por el CONACYT y 5 proyectos de la Secretaría de Investigación y Posgrado del IPN. Actualmente es responsable de un proyecto CONACYT (178564) con vigencia de 2012-1015 titulado "Representaciones sociales asociadas a las matemáticas presentes en estudiantes y profesores de matemáticas".



Curriculum Vitae Kees Hoogland

Name

Dr. Kees Hoogland

- * Associate professor Didactics of Numeracy and Mathematics Education HU University of Applied Sciences Utrecht, The Netherlands
- * OECD-Member of PIAAC 2nd cycle Numeracy Expert Group



Former work experience

Netherlands	2015 – 2017	Researcher and Curriculum Developer at SLO - the Netherlands
		Institute for Curriculum Development
	2013 – 2015	CEO at APS – National Centre on School Development
	1985 –	Mathematics Teacher, Mathematics Educator, Journal Editor,
		Text book author, ICT developer
Indonesia	2001 – 2011	Consultant on Indonesian Mathematics Reform
		23 visits as project leader, trainer, coach, consultant
Suriname	2009	Consultant on Mathematics Education
Russia	2005	Consultant on Mathematics Education and ICT
South Africa	2004 – 2005	Consultant on Mathematics, Science and Technology Education
Belarus	2001	Visit on Realistic Mathematics Education
Aruba	1998 – 2001	Consultant on Aruban Educational Reform
Greece	2000	Lecture on Technology in Mathematics education
UK	2000	Lecture on Dutch Development in Graphic Calculators
Russia South Africa Belarus Aruba Greece	2005 2004 – 2005 2001 1998 – 2001 2000	Consultant on Mathematics Education and ICT Consultant on Mathematics, Science and Technology Education Visit on Realistic Mathematics Education Consultant on Aruban Educational Reform Lecture on Technology in Mathematics education

Recent peer-reviewed publications

- Hoogland, K., de Koning, J., Bakker, A., Pepin, B. E. U., & Gravemeijer, K. (2018). Changing representation in contextual mathematical problems from descriptive to depictive: The effect on students' performance. *Studies in Educational Evaluation*, 58, 122-131. doi:10.1016/j.stueduc.2018.06.004 (open access)
- Hoogland, K., Pepin, B., Bakker, A., de Koning, J., & Gravemeijer, K. (2016). Representing contextual mathematical problems in descriptive or depictive form: Design of an instrument and validation of its uses. *Studies in Educational Evaluation*, 50, 22-32. doi:10.1016/j.stueduc.2016.06.005 (open access)
- Hoogland, K., Pepin, B., de Koning, J., Bakker, A., & Gravemeijer, K. (2018). Word problems versus image-rich problems: an analysis of effects of task characteristics on students' performance on contextual mathematics problems. *Research in Mathematics Education*, 20(1), 37-52. doi:10.1080/14794802.2017.1413414 (open access)
- Hoogland, K., & Tout, D. (2018). Computer-based assessment of mathematics into the twenty-first century: pressures and tensions. *ZDM*, *50*(4). doi:10.1007/s11858-018-0944-2

Conferences (p = with presentations)

CERME 2017, 2019(p)

ICME 1988, 1992, 1996, 2000, 2004, 2012(p), 2016(p), 2020(p)

ICSEI 2008(p), 2009(p), 2010(p)

ALM 2004(p), 2007(p), 2009(p), 2010(p), 2011(p), 2015(p), 2016(p), 2017(p), 2018(p)

ISDDE 2009, 2016(p)



Visit CERME11 (Utrecht, The Netherlands, 6th – 10th February 2019) https://cerme11.org/

Curriculum Vitae



Prof. Dr. Matthias Ludwig (* 15.02.1967) Goethe University Frankfurt, Faculty of Mathematics, Institute of Mathematics education

Matthias Ludwig holds a master's degree as a teacher for mathematics and Physics for lower and upper secondary School (1994). He has taught in schools for more than 8 Years. During his time as teacher he finished his dissertation at the University of Würzburg (1997, Prof. Dr. H.-J. Vollrath). After a few of years as an assistant at the University of Würzburg (Prof. Dr. H.-G. Weigand) he worked from 2002 till 2011 as a full professor for mathematics and mathematics education at the University of Education in Weingarten/Germany. Since March 2011 he is full professor for mathematics education at the Goethe-University in Frankfurt.

His area of research includes math education in China, project based learning, space geometry, mobile learning (new technologies) and modeling and application.

Matthias Ludwig keep in touch with Chinese researchers since 2002 when the Hanns-Seidel-Foundation sent him to several weeks lasting in-service teacher education to China. Two years later he was the founder of an Bilateral cooperation between PH Weingarten and Zhejiang International Study University founded be the MOE. Later he held two guest lectureships in Shanghai at East China Normal University (Shanghai) August-September 2005 and April-July 2007 founded by the DAAD. In 2010 Matthias Ludwig was responsible for the first Sino-German symposia on mathematics education.

He also was guest lecturer at Monash University (Australia) in 2012 and Rhodes University (South Africa) in 2017.

Matthias Ludwig also did research about the usage of new technologies doing math lectures in a different way. So he developed a special semi virtual seminar where Students from different countries work on special modeling task (founded by the DAAD and the EU (2006/2009/2011). He also leads a European Researcher Group which cares about teaching and learning math with math trails. These projects are founded by the EU. His current project (2017-2020) MoMaTrE is about mobile math trails in Europe (www.mathcitymap.eu).

Matthias Ludwig was leading a geometry group, a sub-section of the German Society of mathematics education from 2003 to 2013 due to this function he is responsible for the annual meeting. 2012 he was the convenor of the annual meeting of the German Society of mathematics education (GDM).

Further on he was editor of several mathematic textbooks for the lower secondary and a journal for mathematics teachers. He was member in several organizing teams for Topic study Groups at international conferences (CERME 2007, 2011 EARCOME 2007, 2010, 2013 and ICME 2008, 2012, 2016). Now he is Co-Chair for the TSG "Geometry learning" for ICME 2020 in Shanghai.

Frankfurt, 10.07.18

Matthias Ludwig

Curriculum Vitae



Simone Jablonski (* 26.11.1992)

Goethe University Frankfurt, Faculty of Mathematics and Computer Science, Institute of Mathematical and Computer Science Education

Simone Jablonski achieved her First State Examination after her studies leading to secondary teacher accreditation for Mathematics and English at Goethe University (2012-2017). During her studies, she worked as a student assistant at the study guidance and the Institute of Mathematical and Computer Science Education of Goethe University Frankfurt.

Since 2017 she has worked as a research assistant and PhD student in the team of Matthias Ludwig at Institute of Mathematical and Computer Science Education at Goethe University Frankfurt. Her research projects are "MathCityMap" (outdoor mathematics education with math trails) and "Young Math Eagles Frankfurt" (enrichment program for mathematical gifted students), which is supported through a scholarship by the Stiftung Polytechnische Gesellschaft Frankfurt.

In 2012, Simone Jablonski received the "DMV Baccalaureate Award". From 2012 till 2014 she was supported by the "German Scholarship". After presenting her final thesis at the DMV conference for students in 2017, she won a prize. In 2018, together with the MathCityMap team, she was honored as "Mathemacher des Monats".

During her PhD studies, Simone Jablonski participated at different conferences. In 2017, she held a presentation at DMV conference in Salzburg on her final thesis. In 2018, she gave a poster presentation at GDMV conference in Paderborn on giftedness and a "MathCityMap" workshop at MNU (GermanSTEM-Teacher Association) conference in Munich. Further, she conducted several teacher trainings on "MathCityMap" in several locations and countries.

Frankfurt, 10.07.18

Simone Jablonski

CV de Vicenç Font Moll

Es Profesor de Didáctica de la Matemática de la Universitat de Barcelona (UB). Es coautor de diversos trabajos en los que se desarrolla el enfoque ontosemiótico de la cognición e instrucción matemática. Ha sido, investigador principal en varios proyectos de investigación, en España y América Latina, en la línea de investigación sobre el desarrollo de competencias del profesor de secundaria de matemáticas.

Ha publicado artículos en torno a la educación matemática en las principales revistas de investigación de didáctica de las matemáticas (Educational Studies in Mathematics, ZDM, Bolema, Journal of Science and Mathematics Education, Enseñanza de las Ciencias, Infancia y Aprendizaje, Revista de Educación, Educación Matemática, Eurasia Journal of Mathematics, Science and Technology Education, etc.).

Ha presentado ponencias invitadas y comunicaciones en congresos internacionales (CIBEM, PME, CERME, ICME, CIEAEM, SEIEM, etc.). También ha sido revisor de artículos de investigación en diferentes revistas y ha dirigido tesis de máster y de doctorado. Ha impartido numerosos cursos de formación permanente de profesores de secundaria, cursos en masters y en programas de doctorado de diferentes países.

Actualmente es el coordinador de la Universitat de Barcelona del Máster de Profesor de Secundaria de Matemáticas y coordinador de la línea de investigación sobre Didáctica de las Matemáticas del programa de doctorado *Didáctica de las Ciencias, las Lenguas, las Artes y las Humanidades* de la Universitat de Barcelona.