

PROMOTION RECOMMENDATION

The University of Michigan-Flint
College of Arts and Sciences
Department of Mathematics

Laura McLeman, assistant professor of mathematics, Department of Mathematics, College of Arts and Sciences, is recommended for promotion to associate professor of mathematics, with tenure, Department of Mathematics, College of Arts and Sciences.

Academic Degrees:

Ph.D.	2009	University of Arizona, Tucson, Arizona
M.A.	2000	University of Arizona, Tucson, Arizona
B.S.	1997	Stockton University, Pomona, New Jersey

Professional Record:

2010-Present	Assistant Professor of Mathematics, University of Michigan-Flint
2008-2010	Adjunct Faculty, Willamette University, Salem, Oregon
2004-2008	Coordinator, Secondary Education Program in Mathematics, University of Arizona, Tucson, Arizona
2002-2004	Adjunct Faculty, University of Arizona, Tucson, Arizona
2001-2002	Teacher, Pusch Ridge Christian Academy, Tucson, Arizona
2000-2001	Teacher, Long Branch High School, Long Branch, New Jersey

Summary of Evaluation:

Teaching – As the only mathematics education specialist in the Department of Mathematics, Professor McLeman has played a pivotal role in supporting both basic mathematics courses and the mathematics education program at the University of Michigan-Flint. A review of her teaching materials, student evaluations, alumni surveys, and peer evaluations demonstrates that she is a reflective teacher who constantly adjusts her pedagogy to the needs of her students. Beyond the 12 different courses she has prepared and taught, Professor McLeman is very involved in student advising, supervision of senior projects and research, and student learning outcomes assessment. She is a highly effective and engaging teacher with an outstanding record of pedagogical development whose expertise has greatly benefited her students.

Research – Professor McLeman has produced 13 peer-reviewed articles in journals and conference proceedings in her field of mathematics education which can loosely be organized into three interrelated strands: beliefs and preconceptions of preservice teachers, mathematics teacher educators' dissemination of practices, and equity in the classroom. Her body of work represents substantive, significant, high-quality scholarship that demonstrates a commitment to engaging a diverse group of scholars. Her use of both qualitative and complex quantitative methodologies enhances her future research opportunities. Her co-authored publications demonstrate both a collaborative spirit and an independence of thought necessary for senior scholars to move among their various fields of inquiry. Professor McLeman's work shows signs of increasing relevance to

both theoreticians and practitioners as issues of equity and English language learners are increasingly relevant to our K-16 educational system. Her current work with teacher educator faculty within her program at the University of Michigan-Flint on the redesign of the teacher certification curriculum is also eagerly anticipated and seen as a sign of future productivity in the years to come. Professor McLeman has excelled at scholarship and her innovative approaches are outstanding.

Recent and Significant Scholarly Activity:

Refereed Journal Articles

- Vomvoridi-Ivanovic, E. and McLeman, L. (in press). "Mathematics Teacher Educators Focusing on Equity: Potential Challenges and Resolutions." To appear in *Teacher Education Quarterly*.
- McLeman, L. and Piert, J. (2013). "Considering the Social Justice Mathematical Journey of Secondary Mathematics Preservice Teachers." *Journal of Urban Mathematics Education*, 6(1), 71-80.
- Fernandes, A. and McLeman, L. (2012). "Interpreting and Using Gestures of English Language Learners in Mathematics Teaching." *Teaching for Excellence and Equity in Mathematics*, 4(1), 15-23.
- McLeman, L. and Fernandes, A. (2012). "Unpacking Preservice Teachers' Beliefs: A Look at Language and Culture in the Context of the Mathematics Education of English Learners." *Journal of Mathematics Education*, 5(1), 121-135.
- McLeman, L., Fernandes, A. and McNulty, M.* (2012). "Regarding the Mathematics Education of English Learners: Clustering the Conceptions of Preservice Teachers." *Journal of Urban Mathematics Education*, 5(2), 112-132.
- McLeman, L. and Vomvoridi-Ivanovic, E. (2012). "Understanding the Knowledge and Practices of Mathematics Teacher Educators Who Focus on Developing Teachers' Equitable Mathematics Pedagogy." *Journal of Research in Mathematics Education*, 1(3), 278-300.
- McLeman, L. (2012). "Prospective Teachers' Conceptions About Language and Mathematics Regarding English Language Learners." *International Electronic Journal of Mathematics Education*, 7(1), 21-38.

* Undergraduate Student.

Refereed Book Series Chapter

- Menéndez, J. M., McLeman, L., Musanti, S., Trujillo, B. and Kahn, L. (2012). "Adapting Instruction for Latina/o Students: A Collaborative Study Between Teachers and Researchers." In J. M. Bay-Williams and W. Speer (Eds.), Professional Collaborations in Mathematics Teaching and Learning: Seeking Success For All. 74th yearbook, pp. 75-86, Reston, VA: National Council of Teachers of Mathematics.

Refereed Conference Proceedings

- Fernandes, A. and McLeman, L. (2012). "Developing the Mathematics Education of English Learners Scale (MEELS)." In L. R. Van Zoest, J-J. Lo, and J. L. Kratky (Eds.), Proceedings of the Thirty Fourth Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, (pp. 591-597). Western Michigan University, Kalamazoo, Michigan.

McLeman, L. and Fernandes, A. (2011). "Exploring Preservice Teachers' Beliefs About the Mathematics Education of English Language Learners." In L. R. Wiest and T. Lamberg (Eds.), Proceedings of the Thirty Third Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education, (pp. 190-198). University of Nevada, Reno, Nevada.

Refereed Conference Presentations

McLeman, L. and Vomvoridi-Ivanovic, E. (2016, accepted). "Resolving Challenges That Mathematics Teacher Educators Face When Teaching Through a Lens of Equity." Annual Meeting for the Association of Mathematics Teacher Educators, Irvine, California.

Vomvoridi-Ivanovic, E. and McLeman, L. (2013). "Mathematics Teacher Educators' Conceptions of Equity." Annual Meeting for the Association of Mathematics Teacher Educators, Orlando, Florida.

McLeman, L. and Vomvoridi-Ivanovic, E. (2012). "Engaging in Dialogue About the Examination of Mathematics Teacher Educators' Practice Regarding Teaching For Diversity." Annual Meeting for the Association of Mathematics Teacher Educators, Fort Worth, Texas.

McLeman, L. (2011). "Understanding Perceptions Through the Use of Children's Thinking Activities." Annual Research Pre-Session of the National Council of Teachers of Mathematics, Indianapolis, Indiana.

McLeman, L. and Menéndez, J. M. (2011). "Teachers and Researchers Adapting Instruction for Latino/a Students: A Collaborative Model for Professional Development." As part of the Symposium entitled, 'Advancing Mathematics Learning for Latino/a Students: Innovative Models for Teacher Professional Development.' Annual Meeting of the American Educational Research Association, New Orleans, Louisiana.

Service – Professor McLeman has demonstrated an extraordinary commitment to service to the Department of Mathematics, college, university and community, many times what is expected of junior faculty members. Professor McLeman has been instrumental in helping to improve the relationship between the School of Education and Human Services and the College of Arts and Sciences, teaching courses in both units, and making essential contributions to the redesign of the Secondary Teacher Certification Program. Her work was instrumental in assuring that the Mathematics Teacher Certification Program was the first nationally recognized program in our university. Professor McLeman's passion for student success guides each of her activities within the department, in university committee work, and in the community. She has repeatedly influenced committees to alter their practices and policies to provide the best possible experiences for students and she interacts in creative and thoughtful ways with colleagues across the university.

External Reviewers:

Reviewer (A): "Her contributions, specifically, her efforts to bring equitable mathematics pedagogy to University mathematics teacher preparation are substantial and important. In comparison to other experts in the field at this point in their career, Dr. McLeman's contributions are very strong... .. Her consistent and cohesive set of publications, and collaborative research with scholars in other settings, indicate she will continue to grow professionally and be a productive mathematics educator."

Reviewer (B): “Dr. Laura McLeman is a thoughtful, highly productive, and an academically and socially responsible scholar. Her scholarly work... ..is characterized by a strong commitment to addressing equity issues in mathematics education, particularly to the preparation of secondary mathematics teachers to better serve student populations who have been historically underrepresented in this field. Dr. McLeman has an exceptional scholarship record... She has published eight refereed journal articles, six of which she is a single or lead author... ..all of her publications and presentations are highly regarded in the fields of mathematics education, with most of the articles appearing in journals that have an acceptance rate between 10% and 30%.”

Reviewer (C): “The fact that I can see a coherent storyline within her CV and sample scholarly publications sent to me is evidence that she has been clear and deliberate about her scholarly work... ..I see two inter-related strands of research focused on addressing inequities in mathematics education... .. Both of these areas of scholarship are important and I see evidence of high quality scholarship in both of these foci in her documents... ..Dr. McLeman’s accomplishments are equivalent if not higher to peer groups of mathematics educators I have assessed who work in comparable kinds of institutions to UM-Flint...”

Reviewer (D): “I reviewed 10 publications and, overall, find that they are of the highest quality... ..she has made progress on three fronts: a) examining pre-service teachers’ beliefs about ELs and mathematics learning, b) analyzing cognitive interviews with English Learners (ELs) solving mathematics problems and using these interviews for teacher education, and c) exploring equity issues in mathematics education... .. [Regarding Vomvoridi-Ivanovic and McLeman’s article] The finding that MTEs [Mathematics Teacher Educators] held multiple conceptions of equity is new and important; it is crucial for further theoretical and practical work to include such variation in notions of equity... .. Overall, Dr. McLeman’s publications show evidence that her work is theoretically solid, disciplined, grounded in previous research, methodologically sound, and highly relevant to classroom practice and teacher education... .. Her work... ..is highly original, important, and relevant.”

Reviewer (E): “Dr. McLeman is one of the emerging scholars who... ..has been successful in creating a rich professional trajectory... .. Through a series of bold and honest conversations, they [McLeman and Piert] explored aspects of collegiate mathematics, particularly rooted in abstraction and decontextualization... .. I am impressed by the richness and coherence of Dr. McLeman’s professional portfolio.”

Reviewer (F): “...Dr. McLeman has established a clear line of research that is significant, creative, and original... .. Her work has appeared in the premiere academic journals of her field such as *Journal of Research in Mathematics Education (JRME)*, *Teacher Education Quarterly*, and *Journal of Mathematics Education*... .. Her work is an embodiment of a scholar who is reflective, an expert in mathematical content, while being committed to issues of equity and access... ..Dr. McLeman has established a solid scholarly identity and demonstrated the potential to critically influence the fields of mathematics and English learner education.”

Reviewer (G): “Dr. McLeman’s research focus is important... ..She focuses on what preservice teachers know about teaching ELLs [English Language Learners] with equity... ..Dr. McLeman’s work on challenges that mathematics education faculty face when trying to thoroughly promote

equitable teaching methods in courses is well informed... ..Dr. McLeman's work is focused on an important, yet underdeveloped niche in the field of mathematics education... .. Dr. McLeman is very active in the field of mathematics education. She serves as a reviewer for several mathematics education journals as well as on committees for national organizations..."

Summary of Recommendation:

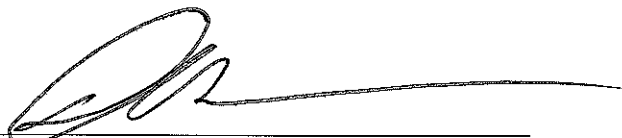
Professor McLeman is a mathematician who specializes in mathematics education and equity issues in education. She is an outstanding teacher who engages her students in deep and meaningful experiences in the classroom and throughout the community. Since joining the Department of Mathematics, Professor McLeman has established a prolific record of scholarship and a service portfolio that rivals most higher ranked professors. Her extraordinary energy and high standards of excellence in teaching both mathematics and mathematics education are phenomenal. The departmental review committee, the college Executive Committee, and I unanimously believe that she has exceeded the thresholds for tenure and promotion. With enthusiasm and confidence in Professor McLeman's future productivity and present value to the College, I recommend that Laura McLeman be promoted to the rank of associate professor of mathematics, with tenure, Department of Mathematics, College of Arts and Sciences.

Recommended by:



Susan Gano-Phillips, Dean
College of Arts and Sciences

Recommendation endorsed by:



Douglas G. Knerr, Provost and
Vice Chancellor for Academic Affairs



Susan E. Borrego, Chancellor
University of Michigan-Flint

May 2016