

Approved by the
Regents
May 21, 2015

PROMOTION RECOMMENDATION
The University of Michigan
School of Education

Gina N. Cervetti, assistant professor of education, School of Education, is recommended for promotion to associate professor of education, with tenure, School of Education.

Academic Degrees:

Ph.D. 2004 Michigan State University, Educational Psychology, East Lansing, MI
M.S. 1996 Rensselaer Polytechnic Institute, Communication and Rhetoric, Troy, NY
B.A. 1993 Loyola Marymount University, Communication, Los Angeles, CA

Professional Record:

2011 – present Assistant Professor, Educational Studies, School of Education, University of Michigan
2008 – 2011 Assistant Professor, Curriculum and Instruction, School of Education, University of Colorado-Boulder
2007 – 2008 Literacy Research and Curriculum Specialist and Literacy Team Leader, Lawrence Hall of Science, University of California, Berkeley
2004 – 2007 Post-doctoral Scholar, Graduate School of Education, University of California, Berkeley
2001 – 2004 Post-graduate Researcher, Graduate School of Education, University of California, Berkeley

Summary of Evaluation:

Teaching: Professor Cervetti has contributed to the School of Education's undergraduate teacher education program at the elementary level, teaching courses on facilitating classroom discussions and teaching with curriculum materials. She also has taught at the graduate level, including courses on curriculum design and evaluation and disciplinary literacy, and has redesigned and taught the second-year professional seminar for doctoral students.

Professor Cervetti's teaching evaluations are consistently strong and increase with each iteration of a course. This demonstrates her ability to accept feedback from her students and revise her courses accordingly. For example, when Professor Cervetti began teaching at the undergraduate level, her mean ratings for the overall quality of the course went from 3.2 to 4.0 over three years. Her ratings with respect to the quality of the instructor are consistently higher than the ratings of the quality of the course, ranging from 4.0 to 4.6. In her graduate courses, her ratings for the common question regarding the quality of the course range from 4.2 to 5.0, with an average of 4.7; the ratings for the quality of the instructor range from 4.8 to 5.0, with an average of 4.9. Comments from students speak to Professor Cervetti's enthusiasm, her deep knowledge of the content, the care with which she designs the course activities and assignments, her availability to meet with students, and her skill in cultivating a productive learning environment in which she manages to support students in expressing diverse opinions and perspectives.

In addition to her classroom teaching, Professor Cervetti advises two doctoral students and chairs one dissertation committee. She also is a member of two other dissertation committees and advises several master's students. During her time at the University of Michigan, Professor Cervetti has distinguished herself as a skillful teacher and mentor. She has made important contributions to core components of the School of Education's teacher education program, master's program sequence, and doctoral concentration in literacy, language, and culture.

Research: Professor Cervetti is a scholar whose research is at the intersection of literacy development and science learning. Focusing on ways in which learners use reading, writing, and oral language to learn science in the elementary grades, her work is at the forefront of contemporary literacy research that examines literacy in the context of subject domains.

There are four strands of Professor Cervetti's work, all of which focus on science literacy and demonstrate her deep commitment to diversity and equity in elementary classrooms, with specific attention paid to English language learners (i.e., students who receive services of language assistance, including students who were not born in the United States and/or students whose primary language is not English). The first strand of her work studies the efficacy of the curriculum and instruction developed for the Seeds of Science/Roots of Reading (Seeds/Roots) project. The Seeds/Roots project aimed to develop curriculum and conduct research that support efforts to increase opportunities for young children to engage in science learning. An unusual characteristic of this strand is that the research reveals complexity in its method, with careful rationale for the selection of the sample, the development of the assessment instruments, and the analysis of a large data set. Furthermore, this research was conducted with a comparison group that provided a rigorous test of the extent to which the differences revealed in student learning could be explained by the integration of science and literacy, as compared to the teaching of the same science content without an integrated language literacy component.

The second strand of Professor Cervetti's research focuses on the role of text genre in students' development of conceptual understanding in science. The issue of how to select and use text in powerful ways in the context of science instruction, particularly in the elementary grades, has been a thorny issue. Professor Cervetti generated a framework to help others in the field think about the structure and function of various genres and features of text. She then collaborated with her colleagues to conduct a study in which they engaged students in reading and responding to two genres of text. This work suggests that the genre used to communicate scientific information does matter, even with young children, and that the trend toward informational text use at earlier grades may be warranted.

The third major strand of Professor Cervetti's research pertains to a central area of inquiry in language literacy, specifically the ideal manner in which to teach vocabulary. Professor Cervetti and her colleagues used a rich conceptualization of vocabulary learning that is consistent with recent calls to add complexity and richness to the question, "what does it mean to know a word?" They translated a multi-dimensional framework into an assessment tool and gathered evidence that spoke to the aspects of word knowledge that can be measured with reliability. This research readily translates to instructional implications regarding the teaching of vocabulary, and Professor Cervetti has prepared publications that do just that.

The final strand of Professor Cervetti's research focuses on the talk used by students and teachers in the context of learning science. This strand foregrounds the knowledge building that occurs in the talk and the role of academic language in that knowledge building. This research is conducted with the use of case studies of middle school teachers teaching urban youth, constructed using multiple data sources. The findings of this study challenge traditional and, arguably, simplistic ways of characterizing patterns of teacher and student exchange.

Professor Cervetti's scholarship reflects the collaborative, transdisciplinary nature of this research. Her research has been published in 14 peer-reviewed journal articles (first author of ten), 15 chapters (sole author of two, both of which are about the integration of literacy and science), and numerous presentations at literacy and general educational research conferences. In addition, she has participated in the preparation of three books. It also is noteworthy that as a member of the Seeds/Roots team, Professor Cervetti wrote seven children's books and 16 teacher guides. She has been a key participant in efforts that have garnered more than \$5 million dollars in research funding.

Recent and Significant Publications:

- Cervetti, G.N., Kulikowich, J. M., & Bravo, M.A. (2015). The effects of educative curriculum materials on teachers' use of instructional strategies for English language learners in science and on student learning. *Contemporary Educational Psychology, 40*, 86-98.
- Cervetti, G.N. and Hiebert, E. H. (in press). Knowledge, literacy, and the Common Core. *Language Arts*.
- Cervetti, G.N. Hiebert, E. H., Pearson, P.D., & McClung, N. (in press). Factors that influence the difficulty of science words. *Journal of Literacy Research*.
- Cervetti, G.N., DiPardo, A. & Staley, S. (2014). Making room for exploratory talk: Science as a context for fostering academic discourse. *The Elementary School Journal, 114*, 547-572.
- Cervetti, G. N., Barber, J., Dorph, P., Pearson P.D. & Goldschmidt, P. (2012). The impact of an integrated approach to science and literacy in elementary school classrooms. *Journal of Research in Science Teaching, 49*, 631-658.
- Cervetti, G. N & Pearson, P.D. (2012). Reading, writing, and thinking like a scientist. *Journal of Adolescent and Adult Literacy, 55*, 580-586.
- Cervetti, G. N., Bravo, M. A., Hiebert, E. H., Pearson, P.D, & Jaynes, C. (2009). Text genre and science content: Ease of reading, comprehension, and reader preferences. *Reading Psychology, 30*, 1-26.

Service: Professor Cervetti's record of service is strong. She has served as a member of the editorial review board for the Literacy Research Association (LRA) Yearbook, as well as for the annual conference and the LRA journal. She also has served on the editorial review board of the field's premier journal, *Reading Research Quarterly*, and on three special committees for the International Reading Association. In addition, she has served as a reviewer for a number of journals on literacy, science, and general education. As her work is recognized at the intersection of literacy and science, Professor Cervetti has been asked to serve on a number of advisory boards and has received consultant appointments that call upon this expertise.

At the school level, Professor Cervetti served for two years on the Educational Studies Executive Committee and chaired the preliminary examination committee for the Literacy, Language, and

Culture unit in Educational Studies. She also served as a member of the faculty search committee for the secondary science education and disciplinary literacy cluster and is the School of Education's representative to the Faculty Senate Assembly.

External Reviewers:

Reviewer A: "Dr. Cervetti's dossier is exceptionally strong and well balanced. There is no question that she is a [junior] scholar whose accomplishments to date are noteworthy and that her potential for future contribution to educational research is unquestionably high ... Dr. Cervetti's articles have appeared in the leading venues pertaining to literacy and science research. Her books and chapters have likewise come from respected presses. There is a discernable thread that runs through her scholarly writings."

Reviewer B: "Overall, Dr. Cervetti has an exceptionally strong research portfolio. Her publications include empirical research in refereed journals, practitioner and policy-maker oriented pieces and numerous books chapters. Thus, the quantity and range of her publications along with the record of grant awards indicate that she is on an excellent trajectory for continued productivity."

Reviewer C: "[Cervetti shows] a rare display of methodological scope which is urgently needed in literacy education. ... Gina's diversity of scholarly expertise is displayed in the variety and volume of professional publications she has authored."

Reviewer D: "What is critical for me as a science education researcher is to see the types of quantitative studies undertaken by Gina. These studies are lacking in science education and thus arguments made are limited in certain ways because of the failure to test theory."

Reviewer E: "Dr. Cervetti's research is stretching the field of literacy education into understandings and challenges that will shape the coming decades. ... She is a leading figure among [junior] scholars and the quality of her work is approaching the level of senior scholars in the field."

Reviewer F: "Dr. Cervetti's work on the Seeds/Roots curriculum is an exemplary contribution to that work and her current research has the potential for ongoing significant contributions."

Reviewer G: "My strong recommendation is that Dr. Cervetti deserves to be appointed to Associate Professor with tenure. She has demonstrated the ability to attain funding for her work and conduct work which is rigorous, methodologically appropriate and to ensure that the work is published in journals of good to high quality. She is a promising scholar and I look forward to reading more of her work."

Reviewer H: "Dr. Cervetti is part of an innovative group doing groundbreaking work that is central in understanding how to achieve the vision of bringing science practices into K-12 classrooms. ... I believe that Dr. Cervetti is developing a program of work that has real promise in influencing important issues that affect both literacy and science learning..."

Reviewer I: “The overall combination of her evolving research agenda and her contribution to the development of the high quality curriculum models contribute significantly to both science and literacy education for both regular-curriculum and English learners.”

Reviewer J: “It is clear that Cervetti has been involved in an important research undertaking, on the basis of which she has written some insightful and high-impact articles. Furthermore, her funding history suggests that she has been to a large extent responsible for the success of that research undertaking and her research statement suggests that the work will continue in productive ways.”

Reviewer K: “Dr. Cervetti’s lead authorship on articles and book chapters clearly define her scholarship in the context of the larger project. Moreover, Dr. Cervetti has started a line of research that is not affiliated with Seeds of Science/Roots of Learning by studying exploratory talk in middle school classes that I hope she develops further in the years to come.”

Summary of Recommendation: Professor Cervetti has provided leadership to a unique and innovative program of research. She has made a successful commitment to translating her work for practitioners, and she is recognized by the field for her expertise. Her most recent research on scientific discourse in the context of investigation-based science teaching is taking her scholarship in a significant, productive direction that is consistent with recent educational reform efforts (represented, for example, by the Next Generation Science Standards and the Common Core State Standards). She has the experience of managing large grants and is poised to garner additional funding. The scholarship that she has honed with respect to the design and study of curriculum is serving our instructional program as well. She has demonstrated that she is a strong teacher and mentor, and she has provided outstanding service to the school and the profession. It is with the support of the School of Education’s Executive Committee and Promotion and Tenure Committee that I recommend Gina N. Cervetti for promotion to associate professor of education, with tenure, School of Education.



Deborah Loewenberg Ball
William H. Payne Collegiate Professor of Education,
Arthur F. Thurnau Professor, and Dean
School of Education

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