



Professional Development in Mathematics for K-8 Educators
Content, Pedagogy, Action Research and Leadership

Information for VMI Applicants and School Officials -- February 2019

What is the Vermont Mathematics Initiative (VMI)?

The Vermont Mathematics Initiative (VMI) Master's Program is a three-year, comprehensive mathematics professional development program. Now in its twentieth year, the VMI is dedicated to supporting highly effective mathematics instruction so that all children can learn the rigorous mathematics needed for success in higher education and the workplace.

What is the mission of the VMI?

The mission of the VMI is to significantly improve the teaching and learning of mathematics in grades PreK-8 across the state of Vermont. Through their VMI experience, teachers build strong mathematics content knowledge, develop the ability to conduct action research around mathematics education issues, cultivate leadership skills, and apply this acquired knowledge and skill in their classrooms and at the school or district level to improve student learning.

What is the academic component of the VMI?

For each of the three calendar years a teacher is enrolled, the VMI offers four, three-credit graduate level courses (two during the summer and one each semester during the academic year). Fieldwork, including work with a VMI mentor, runs concurrently with each course. Upon completing the full three-year VMI program, a teacher will have earned 36 graduate credits and will have completed all of the requirements for a Master of Education (M.Ed) Degree.

What are some of the benefits to schools that participate in the VMI?

In addition to coursework in mathematics content, pedagogy and leadership, the VMI provides support for participants in their schools. Throughout the program, VMI participants:

- Have immediate access to increased mathematics content expertise through the VMI staff, which includes mathematicians, mathematics educators, and master elementary and middle level teachers experienced in professional development.
- Receive ongoing professional development for enhancing their teaching effectiveness and for preparing to take on expanded leadership roles in their schools or districts.
- Have opportunities to form partnerships with VMI staff and other participants resulting in the continuous improvement of learning opportunities for students and support for the school or district mathematics goals.

One should also note that the VMI program evaluation, conducted annually since 2004, has shown that VMI teachers have attained a high degree of mathematics content knowledge and have made significant contributions to mathematics teaching and learning in their schools and across the state. Consequently, students in schools having a VMI trained teacher have experienced significantly higher achievement compared to students in matched control schools.

When and where does the program take place?

The summer courses for the 2019 cohort will be held Monday through Friday in the Burlington area during the weeks of July 8 and July 15, 2019. Academic year courses will be held on Friday/Saturday “weekends”: three during the fall semester and three during the spring semester. VMI academic courses also take place in the Burlington area. *In addition, participants may be required to engage in online discussion forums, tutorial sessions, and topic specific seminars.*

Who should apply?

All PreK-8 educators, including classroom teachers, special educators, interventionists, math coaches, and administrators are eligible for the program. Specifically, applicants must be:

- Dedicated to enhancing mathematics teaching and learning for all students.
- Enthusiastic about increasing their mathematics content knowledge in a supportive environment.
- Willing to share their increased knowledge of mathematics content and effective teaching with their colleagues through mentoring, peer coaching or other forms of professional development.
- Interested in supporting the development and implementation of their school’s mathematics curriculum as well as their school’s mathematics goals.
- Committed to serving as mathematics teacher leaders in their schools and to the appropriate use of local assessment results to improve instruction.

Please note many VMI assignments and projects require participants to incorporate new learning into their teaching, reflect on the effectiveness of their instruction, and modify approaches. Thus, all participants need ongoing opportunities to work directly with students in mathematics classes throughout their VMI experience.

What is the application process?

For teachers interested in applying to the 2019 VMI Master’s Degree cohort, the application is available by emailing the VMI Director, Judi Laird (jlaird@burkevt.net). Once the complete application is received, a VMI representative will be in touch with you. Applicants will be notified prior to April 15th of their acceptance.

What is the cost?

With satisfactory completion of a full calendar year’s courses, the VMI teacher will earn 12 graduate credits (6 in the summer, 3 in the fall and 3 in the spring). Of those 12 credits, it is expected that the participant’s district will pay for at least a portion. (This is a

contractual benefit for teachers in many districts.) The remaining credits are the responsibility of the teacher. We are finalizing arrangements with our higher education partner in the next few days and will communicate current tuition rates as soon as possible.

Note: *The overall goal of the VMI is to improve the teaching and learning of mathematics in the VMI teacher's school/district. The VMI teacher and the school/district leadership will work together to help achieve that goal. For that reason, we encourage the school and district to work creatively with the VMI applicant to increase the school's or district's share of tuition and correspondingly reduce the teacher's share.*

A number of strategies have been suggested for doing so, including the following:

- A district develops an MOU with the teacher in which it agrees to pay for one or two courses over and above the Master Agreement in exchange for an agreement by the VMI teacher that she or he will not request any course tuition for a given time frame (e.g., three years) following completion of the VMI. The teacher would further agree that she or he will reimburse the district a prorated amount in the event that the teacher does not renew her or his contract during the life of the MOU period. In brief, such an agreement would give the teacher added tuition funding and at the same time would provide assurance to the district and school that their financial support would benefit the school in the long term. Both the school and the teacher benefit from this arrangement.
- Some districts pay stipends to teachers who take on leadership roles, for example, in curriculum, coaching, mentoring, etc. In this strategy, VMI participants would be able to "earn" additional tuition funding by fulfilling such roles in their schools. This arrangement has the advantage that the teacher's participation in the VMI is tied directly to school impact.
- Title IIA funds can be used to pay for additional VMI tuition. Again, districts can work out MOUs for the number of years that an individual would be expected to work for the district.

Reminder: *Federal tax code provides a number of options for tuition as a deductible expense.*

Teachers who are interested in applying should not be deterred by questions related to cost. Please contact us if you have questions related to financing your VMI tuition.



Who are the instructors?

The VMI Leadership Team consists of the following individuals:

Judi Laird

Director and VMI Cohort 1999 Graduate

Susan Ojala

Co-Director for Mathematics Content and VMI Cohort 2000 Graduate

Robert Laird

Co-Director for Teaching/Learning and School Implementation and VMI Cohort 2000 Graduate

Other members of the instructional staff include:

Dr. George L. Ashline, *Professor of Mathematics, St. Michael's College*

Ralph Bernardini, *Mathematics Teacher and VMI Graduate, Vergennes Union High School*

Dr. Priscilla Bremser, *Professor of Mathematics, Middlebury College*

Josh Bunker, *Mathematics Teacher and VMI Graduate, Rutland Middle School*

Dr. Carol J. Eckels, *retired Principal, Leicester Elementary School*

Luke Fisher, *retired Math Coach and VMI Graduate, Woodstock Elementary*

Fran Huntoon, *Mathematics Specialist, VMI Instructor, Field Mentor and VMI Graduate*

Bill Jesdale, *retired Principal, Lincoln Community School*

Kiran MacCormick, *Mathematics Teacher, Missisquoi Valley HS*

Karen Nee, *Mathematics Teacher and VMI Graduate, Essex Middle School*

Dr. Gregory Petrics, *Assistant Professor of Mathematics, Northern VT University*

Kathy Richardson, *Mathematics Teacher, Field Mentor and VMI Graduate, The Putney School*

Sandi Stanhope, *Primary Mathematics Specialist, Field Mentor and VMI Graduate*

Dr. John Tapper, *Associate Professor of Elementary Education, St. Michael's College*

Dr. Julie M. Theoret, *Professor of Mathematics, Northern VT University*

Dr. Jim Wright, *Assistant Professor of Mathematics, Westfield State University (MA)*