II. RESEARCH AND CREATIVE ACTIVITY

C. SELECTED ACTIVITIES INCLUDING SCHOLARLY PERFORMANCE

RC.7 Participates in development of studies, programs, or creative activities supported by external funding.

I was the co-director with Dr. Janet Tassell for the Toyota Math and Technology Leadership Academy from 2010 – 2013. During the three years of the Toyota Math and Technology Initiative we had many opportunities. We needed to figure out if we wanted to tackle these in a typical way or in an innovative way. Fortunately I believe that most of us can say that we indeed did NOT take the path of least resistance. We DID take the path that had not been taken. We may have needed the Toyota Forerunner to do so!
And, we may have had times when all of us may have wondered if we had pushed ourselves too hard. But, in the end, we have something novel. This, we believe, is what Toyota, WKU, and especially our Scholars would want to be tied to – an innovative model for preparing elementary leaders in mathematics and technology. The following is a summary of some of our accomplishments in this program:

**Accomplishments**

- 14 Math and Technology Teacher Leaders developed for the region
  - The 3-year grant award encompassed 14 teachers—one chosen from 14 of the schools, taking three courses for nine credit hours, all expenses paid, with evening seminars sprinkled throughout the duration of MTLA. The coursework focused on a comprehensive math and technology approach
that will improve teachers’ knowledge and instructional practices in math, technology, diversity, leadership, and assessment.

- In the second and third year of MTLA, participants will lead other teachers in professional development and implementation of the instructional modules in their schools.

- Pedagogy Courses developed for this Initiative
  - ELED 571: Leadership, Math and Technology Education
  - ELED 572: Math and Technology Methods for Diverse Learners
  - ELED 573: Math and Technology Assessment

- Elementary Mathematics Specialist Endorsement Created
  - First in Kentucky!
  - All online!
  - Three pedagogy plus two Math courses (Math 411G, Math 507, Math 508)
  - Seven of the MTLA Scholars were the first to complete the endorsement

- Housing Authority of Bowling Green
  - Collaboration to complete four different projects

- Mini-grants for each scholar at their 14 individual schools

- Professional Growth Plans for each of the 14 participants

- Presentations
  - All 14 scholars have conducted a regional or state conference presentation.
  - The co-directors and consultants have conducted 12 national and international conference presentations.
  - State: KYSTE, KCTM
National: AERA, ISTE, NAGC

• Publications
  o NAGC STEM Newsletter (2012)
  o Six books for 1st-6th Grade Common Core Math through Garlic Press, in press (2013)
  o CREaTE research has yielded one journal article (2011), one book chapter (2011), one proceedings publication (2011), and one book in progress (2013)
  o Parenting for High Potential (journal article, September, 2013)

Toyota MTLA website for more information: http://wkumtla.weebly.com/index.html

We have had 3 MTLA babies and one wedding!

So, how did teachers benefit? Outwardly:

• Nine hours of graduate credit upon successful completion of the three courses
• Receive laptop computer the first year and a MAC in third year
• A $2000 stipend per participant upon completion of the grant award requirements
  PLUS extra $500 per approval of Toyota USA Foundation

But internally, it is always nice that is does remain a bit of a mystery and that you cannot quite put your finger on it – sometimes it takes a digital story to tell the story. The best part is, we hope to feel the effects from this initiative for years to come.