

**Assessment Survey
(Post Graduate)
Responses**

III. Please state briefly your goals since you have completed your mathematics major at ISU.

- I am pursuing a masters in math and possibly a Ph.D. in either math or math ed. I want to tutor, teach, explore, research, and enjoy math.
- I work for Ford Motor Company – finance department. I currently work in financial aid. I will be pursuing a Ph.D. in Public Budgeting Public Administration.
- Pass all necessary actuarial exams to become an FSA. I have passed two more exams since graduating in May 2004, bringing my total completed exams to three.
- M.S. Operations Research. M.S. Technology Defense Systems programs. Operations Analyst for U.S. Navy.
- Obtain Ph.D., Mathematics, in 5 or 6 years. Accumulate teaching experience. Upon obtaining Ph.D., get a college teaching position.
- I want to teach math, especially geometry, in a high school in central Indiana. I want to use techniques and activities I learned in my methods classes in my classroom with the students.
- Continually improve my skills in a math-based career.
- I am currently teaching High School. My classes include AP Calculus, Geometry, and Pre-algebra. I am going to start my master's degree in mathematics this summer, and I am thinking about getting a Ph.D. in statistics.
- I have worked as a software engineer and electrical engineer. My degree has given substantiation to my skills and abilities. In electrical; I use the calculus and linear equations, I support manufacturing so I have use of statistical analysis and this works well with knowledge in 6σ (six sigma).
- Upon graduation I obtained a job in an analytic field in which I use my mathematics every day. My goals consist of going to grad school to get my Master's degree and to further educate myself in my current position to gain promotions.
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IV. Please indicate any ways you can see that we can improve the undergraduate major.

- a. Using Calculus and Differential Equations on a more frequent basis and having one more Analysis class would have helped me greatly. ISU was a great choice for me. The pace was a little laid-back which helped me to really learn the material, figure out how and why it worked and also gave me time to work on math independently. The faculty is great but there should be more upper-level math courses available.

- b. Start a math cohort. Start a mentoring program so that the upper classmen can help the freshmen and sophomores. More English professors or reserve them to teach the upper level courses. Market your scholarships and assistantships.
- c. I think the general curriculum is good. Perhaps more emphasis on advanced subjects would be good. More use of computer programs, even something as basic as Excel, would be helpful, as well as a little more real-world application of topics.
- d. Offer more statistical and applied courses.
- e. Encourage students to join faculty to conferences. Encourage/require independent study.
- f. Based on the Secondary Mathematics Education Undergraduate Program:
 - 1. "Breaking Down the Standards" – When you interview with school principals, you are almost always asked "What are the big ideas or standards you will be teaching in the middle school or the high school?" I found myself thinking – I really wish I could have sat down in my middle school and high school method courses and looked at 2 or more middle school math books. I would have liked to have gone through the book and studied the connections from one chapter to another so I could understand the progression of skills from one chapter to another. I feel that it would be beneficial for current and future undergraduate students to go through several middle school math textbooks like 7th grade math, pre-algebra, algebra, and geometry textbooks. Currently, I am teaching 7th grade math. Going through the textbook now, I see how important fractions are to the second semester of math. They are used with proportions, scale drawings, unit rates, ratios, etc. Another example would be integers which can be used in solving equations.
 - 2. "Guest Speakers" – I think it would be very beneficial for current and future undergraduates to hear two or three math teachers from different types of schools speak about what is expected from them by their administrators and the district. Other topics would include: common assessments, remediation, etc. I think it would also be beneficial to hear from principals about their views i.e. their expectations from math teachers and teachers in general. These teachers should be from different types of communities. Examples include:
 - a. Monroe-Gregg School District is a very small populated area where the breakdown of student race is Caucasian. There are only 6 math teachers combined for the middle and high school. They make their own quizzes and tests. The day consists of 7 periods a day at 55 minutes each.
 - b. MSD of Wayne Township a township of Indianapolis, is a very large populated area where the breakdown of student race is Caucasian, African American, and Hispanic/Latino (ENL or ESL – English as a New Language or English as a Second Language). There are 8 math teachers just for 7th grade math and a total of 16 math teachers for 7th and 8th grade math. There are common assessments like the quizzes and tests. There is a daily warm-up when the students begin math class everyday! The entire 7th grade does the exact same warm-up. After every test, there is data collected from those tests that must be turned into the department chairperson. All the assessments must be translated into Spanish for the ENL students who do not speak much English. Also, this system is set-up on block scheduling. It consists of even/odd days where the students have a

homeroom and then 4 class periods every day. They go to math and English everyday, but go to Social Studies and Science every other day. The periods are 80 minutes long. Here – there are two separate “worlds” with one goal in mind – to teach and help students understand math.

- g. Explain more options available to math majors. More applied math. More work with Excel and Access. More modeling.
- h. Look into adding programs like statistics and actuarial science. My linear algebra class was too easy – most of the information learned in there was covered in another class. There was a lot of cheating that I witnessed. Especially in the classes that also had graduate students. It made me very upset, because nothing was ever done about it. I must say that I absolutely loved my time in the math department. Please keep it small, that is what attracted me. Really being able to get to know the professors is great! Thanks to you all!!
- i. I would require trig before calculus II. I took trig and found it to be one of my better moves. The classes in math theory were lacking. But that professor isn't there anymore. I signed up for windows programming and got predicate calculus. I wanted Windows. Stop doing this to your students. If it says Windows, load up Visual C++ and study Windows and Windows Processes, and Active-X.
- j. I can't imagine the ISU Math Department being any better. I had nothing but positive experiences throughout my 4 years. Thanks for everything!
- k.

