

1116-VE-702 **Jingzhong Zhang*** (ztong@otterbein.edu), Guangzhou University, Guangzhou, Guangdong , Peoples Rep of China, **Zhaochi Zhang** (ztong@otterbein.edu), The Journal of Research in Advanced Mathematic, Northwest Poly Technology University, Xi'An, ShanXi , Peoples Rep of China, and **Zengxiang Tong** (ztong@otterbein.edu), Department of Mathematical Sciences, Otterbein University, Westerville, OH 43081. *Integrated Trig-Geometry*.

Based on Prof. Zhang's decades of research, this presentation outlines an ambitious plan of reorganizing the courses of geometry and trigonometry in high school. With a very basic knowledge, we introduces the sine function $\sin A$ using areas, and use the trigonometry and area methods to integrate trigonometry and geometry. The teaching experiments have shown that even middle school students can learn it very effectively, and the students learning the integrated Trig-Geometry perform better than students learning them using traditional textbooks. (Received September 10, 2015)