Before the spinning wheel, yarn and thread were made using spindles. There has been a recent renewed interest in spinning using hand make spindles. Spinners wish to have spindles that are both functional and attractive. We will discuss a project that was given to a first semester calculus class that required students to design a Tibetan style support spindle that could be used to spin yarn. The project required students to use Riemann sums to derive the formula for the moment of inertia for a solid of revolution and apply their formula to design an attractive spindle with the right moment of inertial. (Received August 27, 2013)