

Learning Plant Anatomy: Is Hands-Off Better Than Hands-On?  
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Abstract: Historically, plant anatomy was taught by having students microscopically examine prepared and stained slides of sectioned plant tissues. However, annotated image banks of plant tissues are now readily available on-line; the quality of these images far exceeds what students would see with the microscopes. The teaching of plant anatomy can now easily be done in a “hands-off” fashion without the use microscopes. However, biology teachers have long held to the notion that “hands-on” biology is superior and in this case, making students use microscopes to view plant tissues presumably yields a valuable learning experience. This project seeks to determine how students best learn plant anatomy. I will compare hands-off vs. hands-on approaches.