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**Using dynamic geometry software for teaching conditional probability with area-proportional Venn diagrams.**

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Summary: This classroom note illustrates how dynamic visualization can be used to teach conditional probability and Bayes' theorem. There are two features of the visualization that make it an ideal pedagogical tool in probability instruction. The first feature is the use of area-proportional Venn diagrams that, along with showing qualitative relationships, describe the quantitative relationship between two sets. The second feature is the slider and animation component of dynamic geometry software enabling students to observe how the change in the base rate of an event influences conditional probability. A hypothetical instructional sequence using a well-known breast cancer example is described.

*Classification:* K50 U50

*Keywords:* teaching and learning probability; conditional probability; dynamic visualizations; area-proportional Venn diagrams; weighted Venn diagrams

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