This talk discusses the many ways in which instrumental variables (IV) methods can be used to estimate causal effects. The ideas are explained with examples, beginning with IV estimates of the effects of childbearing on parents’ employment and hours worked. On the theoretical side, I explain the local average treatments effects (LATE) interpretation of IV estimates in models with heterogeneous potential outcomes and show how IV solves compliance problems in randomized clinical trials. Examples here include the effect of job training and the impact of arrest in domestic violence police calls. Finally, I turn to the use of IV to evaluate the effects of a variable treatment, using the economic returns to schooling as an example.