Under-preparedness in basic mathematics is rampant among Canadian college students. In an effort to characterize this problem, a series of studies (the College Math Project) has determined that one-third of all college students in the province of Ontario are at risk of not completing their programs because of low ability in basic mathematics. This presentation reports the results of a control group trial of an approach to teaching developmental mathematics intended to remedy the under-preparedness problem. This approach has been adapted from a Canadian elementary school curriculum, JUMP Math. The instructional approach centres around explicit instruction and tightly-scaffolded lessons that gradually increase in difficulty and depth. Overall, the adapted JUMP Math approach produced favourable results, but not without further questions being raised. (Received September 16, 2014)