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**Complement or Substitute? The Effect of
Technology on Student Achievement in India**

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Abstract: Using a pair of randomized evaluations, I evaluate a computer assisted learning program designed to reinforce students understanding of material presented in class. The program was implemented in both an in-school and out-of-school model allowing me to assess different strategies for integrating the technology into the existing schools. The effect of the program critically depends on the method of implementation. The program was a poor substitute for the teacher delivered curriculum and as a result, the in-school model caused students to learn significantly less than they otherwise would have learned (-0.57 standard deviations). When implemented as a complement to the normal program in the out-of-school model, however, the program generated average gains of 0.28 standard deviations reflecting small positive (but statistically insignificant) gains by most students and large positive gains by the weakest and older students in the class (from 0.4 to 0.69 standard deviations). The results emphasize the importance of understanding how new technologies and teaching methods both interact with existing resources and differentially affect students with different needs and abilities.

Keywords: Education, Development, Computer Assisted Learning

JEL Codes: I21, I28, O15

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