Our Developmental Mathematics Program has faced two main challenges in recent years: increasing enrollments and diminished student productivity outside of the classroom. Previously, our classes had been primarily lecture and paper and pencil group work with computer assignments for homework outside of the classroom. To address these challenges, we have restructured our classroom time to incorporate time in the computer lab. In addition, we have shifted tutoring availability to include hours in the lab; similar to the math emporium models at other schools. This talk will discuss various methods employed to use the lab effectively for the Developmental Mathematics classroom; pitfalls in the process and solutions; and measurable outcomes of successes and failures in our initial implementations. (Received September 08, 2016)