At Salem State College, our M.A.T. in Middle School Mathematics is targeted to teachers originally licensed as elementary generalists but who now teach mathematics in grades five through eight. The program began as a grant-funded professional development partnership with three local school districts. Our assessment process has included pre- and post-testing in the mathematics content courses and follow-up observations (by liaisons in the districts) of the teachers implementing lessons based on what they had studied in our courses. In addition, we have surveyed program participants as to their own level of comfort with the mathematics and how they have used it in their classrooms. I will briefly outline our program and present our findings. (Received September 10, 2008)