

Meeting: 1003, Atlanta, Georgia, MAA CP G1, MAA Session on Drawing on Our Students' Thinking to Improve the Mathematical Education of Teachers

1003-G1-353 **G. Brock Williams*** (williams@math.ttu.edu), Dept of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409. *Using LearnStar to Gain Insight into the Thinking of Pre-Service Teachers and our Curriculum.* Preliminary report.

For the last several semesters we have been adapting the LearnStar quiz system for use in the university setting. LearnStar is an interactive quiz system using either handheld wireless devices or a networked computer lab to conduct competitions among students. Students earn points for correct answers — the faster the response the more points. Results for the top students are displayed to encourage those who do well without embarrassing those who do not.

This technology has also given us valuable new insights into the thinking of our elementary education majors, which has, in turn, shaped our curriculum. All our elementary education majors complete a capstone course focusing on the integration of technology into the classroom. Students not only use LearnStar as a tool to learn the course material, but they also write their own competitions over both the material discussed in the course and also the material they someday hope to teach. This not only gives them practice deciding how best to integrate technology in their classroom, but also provides a great opportunity to observe how they view the material. The sections they emphasize, the style of questions they ask, and any mistakes in their phrasing, all serve to illustrate the depth of their understanding. (Received September 12, 2004)