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Dianna J Spence* (djspence@ngcsu.edu), NGCSU Dep't. of Math & Computer Science, 82 College Circle, Dahlonega, GA 30597, and **A. Robb Sinn** and **Brad Bailey**. *Using Authentic Discovery Projects to Improve Student Outcomes in Statistics*. Preliminary report.

We report activities & findings of a 3-year project, "Authentic, Career-Specific, Discovery Learning Projects in Introductory Statistics," funded by the National Science Foundation. The project scope includes: 1) developing teaching materials for using discovery projects to teach statistics; 2) training instructors to use the materials developed; and 3) evaluation of student outcomes, in both content knowledge and attitudes toward statistics. With an interdisciplinary team of instructors, materials were developed to assist the teacher in facilitating projects using linear regression and t-tests. Five pilot instructors used these materials in their classes. Data collected included qualitative data regarding teacher observations while employing the materials, as well as quantitative data about student performance and attitudes. Before the pilot phase, preliminary data suggested that students in classes using discovery projects achieved higher content knowledge and stronger perceived usefulness of statistics than did their traditional class counterparts. Further analysis from the pilot of the materials confirms that students using discovery projects achieve higher content knowledge, as well as stronger self-beliefs about their ability to understand and use statistics. (Received September 16, 2009)