

1106-L1-2683      **Hyejin Park\*** (hjpark3@uga.edu), Athens, GA 30602. *Prospective teachers' evaluation of students' arguments that use mathematical induction*. Preliminary report.

Principles and Standards for School Mathematics note that "Students should learn that certain types of results are proved using the technique of mathematical induction" (NCTM, 2000, p. 345). Secondary mathematics teachers must teach MI, and therefore have solid knowledge of MI, including proficiency reading and analyzing student arguments that use MI. Most studies on the learning and teaching of MI (e.g., Harel, 2001) have focused on student and teacher knowledge of MI. Little research has examined how teachers read and reflect on student arguments. In this study, I examined the characteristics of three prospective secondary teachers when analyzing student arguments using MI, presented in an interview setting and situated in the context of teaching at the secondary level. In the examination of arguments, participants focused on the base and inductive steps proposed by the principle of MI. They checked the correctness of algebraic manipulations showing how  $P(n+1)$  was derived from  $P(n)$ , but disregarded algebraic errors in their validations. When asked to give criteria for evaluating student arguments, participants wished to see correct base case, inductive step, and algebra. This raises questions about how participants will evaluate student arguments if algebraic errors are present. (Received September 16, 2014)