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**John Paul Cook\*** (jpcook@usao.edu), **Brian Katz** and **Milos Savic**. *The Transfer of Knowledge from Groups to Rings: An Exploratory Study*. Preliminary report.

Typical undergraduate course sequences in abstract algebra initiate with group theory before proceeding to ring theory. This sequencing, along with the structural similarities between groups and rings, enables many ring-theoretic concepts to be formulated in terms of results from group theory. What remains to be seen, however, is the extent to which students are able to transfer their knowledge of groups while studying topics in ring theory. Using Wagner's transfer in pieces framework, we conducted an exploratory study to investigate how students in an inquiry-oriented classroom capitalized on their knowledge of groups to make sense of rings. Preliminary results indicate both instances of obvious transfer (e.g. subgroup to subring) and also more creative approaches that might lend insight into how students think about ring structure (e.g. characterizing field-like structures as 'abelian groupings'). (Received September 16, 2014)