

962-N1-1281 **Nicholas Jackiw*** (njackiw@mail.keypress.com). *Dynamic geometry visualization in algebra.*

It is difficult to conceive of the extended use of Dynamic Geometry software without being drawn frequently toward questions and issues of trigonometry, graphical analysis, calculus, and other fields that address shape, form, and motion mathematically. This presentation will report on efforts to extend this natural integration among the mathematical subdisciplines. By adding explicit support for symbolic equation input and graphical representations of function, the Sketchpad research group is bringing Dynamic Geometry's paradigm of interactive and continuous feedback to existing plotting contexts, increasing the potential for significant interactions between—and integration of—geometric and algebraic modeling techniques. Through an examination of diverse examples, this presentation will show how such a software environment can help students not only explore and visualize, but reason about mathematical ideas. (Received October 03, 2000)