

**How SAS® Thinks**  
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**Bio:**

Neil is Manager of Statistical Programming at Ingenix Pharmaceutical Services in Basking Ridge, NJ. Neil was a contract instructor for SAS Institute for seven years, teaching fundamentals, programming, macro, report writing, graphics, and the annotate facility. She has been a SAS user for more than twenty years and has presented numerous papers at user group conferences. She chaired SUGI 20 in Orlando, FL.

**Abstract:**

The DATA step is the most powerful tool in the SAS System. Understanding the internals of DATA step processing, what is happening and why, is crucial in mastering code and output. Concepts covered include reading data other than SAS data, reading SAS data, input buffer and Logical Program Data Vector (LPDV) or Program Data Vector (PDV), SAS defaults and automatic SAS variables and how to deal with them, why it's important to understand the internals of DATA step processing, what happens at program compile time, what happens at execution time, how variable attributes are captured and stored. By understanding DATA step processing, you can debug your programs and interpret your results with confidence.