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## 3

## The Reflective Judgment Model: Twenty Years of Research on Epistemic Cognition

Patricia M. King\*  
*University of Michigan*

Karen Strohm Kitchener  
*University of Denver*

Over 15 years ago, Kitchener (1983) suggested that a three-level model of cognitive processing was necessary to account for the complex monitoring that is involved when older adolescents and adults are faced with ill-structured problems (Churchman, 1971; Wood, 1983). These are problems about which "reasonable people reasonably disagree." These problems cannot be solved by the mechanical application of an algorithm; they require making judgments based on the strength of available evidence and the adequacy of argument. For example, citizens are asked to vote on ballot issues such as whether the benefits of spraying for mosquitoes outweighs the health risks, whether a proposed urban growth policy will protect farm land while spurring economic development, and the degree to which a culture of violence and availability of guns contributes to tragedies such as school shootings by teenage boys. People hold opposing and contradictory views about such truly vexing problems, and even the most conscientious parents and involved community leaders become perplexed when trying to decide how to address such issues in responsible, defensible ways.

At the first level of Kitchener's (1983) cognitive processing model, individuals engage in processes like computing, memorizing, reading, and perceiving;

\*Both authors contributed equally to the preparation of this manuscript.

