King and Kitchener: The Reflective Judgment Model

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“Reflective judgments are made by examining and evaluating relevant information, opinion, and available explanations (the process of reflective thinking), then constructing plausible solution for the problem at hand, acknowledging that the solution itself is open to further evaluation and scrutiny.”

- Their question:
  How do people decide what they believe about vexing problems? How do people arrive at their judgments about complex and controversial problems?

- The Reflective Judgment Model is a model consisting of seven stages that describe how assumptions about knowledge and concepts of justification develop from adolescence to adulthood. People progress through stages by acquisition of certain stage-specific skills, and the development of these skills is based on one’s learning environment.

- The theory is grounded in the underlying assumptions of cognitive development by Piaget and Kohlberg, and reflects assumptions from Barry Kroll (from Liberal Education).

- This approach differs from the traditional research of critical thinking in two ways:
  1. Critical thinking is seen as a process of inquiry or problem-solving. The educational assumption is that learning a set of skills or principles and how to use them will lead to critical thinking.
     - Epistemic assumptions play a central role in problems that do not have certainty and in the recognition that problems exist. These assumptions are important to the reasoning process.
  2. Critical thinking is focused on problems that are well-structured as opposed to those that are ill-structured. Well-structured problems are those that have solutions and do not require the problem-solver to consider alternative arguments, seek new evidence, or validate information. Conversely, ill-structured problems are more complex and the outcome may not be known (or known with certainty).
Problems that involve an understanding of knowledge itself known as epistemic cognition, “the process an individual invokes to monitor the epistemic nature of problems and the truth value of alternative solutions.”

(p. 12)

- Only in adulthood do people have the epistemic assumptions that allow for this reflective thinking.

- The authors used the Reflective Judgment Interview to assess where individuals fall in the model. The interview consists of ill-structured question prompts with additional follow-up questions (e.g., Could we ever say that one opinion is in any way better and one is worse?).

- Results:
  - First-year college students have typically scored just above 3.5 (between stages 3 and 4)
  - For college seniors, the average score was around 4.0
  - Adult-age students scores range from 3.0 to 6.5, which supports the fact that situational factors play a role.

Adapted from:

# The Reflective Judgment Model

## Pre–Reflective Thinking (Stages 1, 2 and 3)

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<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
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<tbody>
<tr>
<td><strong>View of knowledge</strong></td>
<td><strong>Concept of justification</strong></td>
<td><strong>View of knowledge</strong></td>
</tr>
<tr>
<td>Knowledge is assumed to exist absolutely and concretely; it is not understood as an abstraction. It can be obtained with certainty by direct observation.</td>
<td>Beliefs need no justification since there is assumed to be an absolute correspondence between what is believed to be true and what is true. Alternate beliefs are not perceived.</td>
<td>Knowledge is assumed to be absolutely certain or certain but not immediately available. Knowledge can be obtained directly through the senses (as in direct observation) or via authority figures.</td>
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"I know what I have seen" | "If it is on the news, it has to be true." | "When there is evidence that people can give to convince everybody one way or another, then it will be knowledge; until then, it's just a guess."

## Quasi–Reflective Thinking (Stages 4 and 5)

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<th>Stage 4</th>
<th>Stage 5</th>
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"I know what I have seen" | "If it is on the news, it has to be true." | "When there is evidence that people can give to convince everybody one way or another, then it will be knowledge; until then, it's just a guess."
Knowledge is uncertain and knowledge claims are idiosyncratic to the individual since situational variables (such as incorrect reporting of data, data lost over time, or disparities in access to information) dictate that knowing always involves an element of ambiguity.

Beliefs are justified by giving reasons and using evidence, but the arguments and choice of evidence are idiosyncratic (for example, choosing evidence that fits an established belief).

Knowledge is contextual and subjective since it is filtered through a person's perceptions and criteria for judgment. Only interpretations of evidence, events, or issues may be known.

Beliefs are justified within a particular context by means of the rules of inquiry for that context and by context-specific interpretations of evidence. Specific beliefs are assumed to be context specific or are balanced against other interpretations, which complicates (and sometimes delays) conclusions.

"I'd be more inclined to believe evolution if they had proof. It's just like the pyramids: I don't think we'll ever know. Who are you going to ask? No one was there."

"People think differently and so they attack the problem differently. Other theories could be as true as my own, but based on different evidence."

## Reflective Thinking (Stages 6 and 7)

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Knowledge is constructed into individual conclusions about illustrated problems on the basis of information from a variety of sources. Interpretations that are based on evaluations of evidence across contexts and on the evaluated opinions of reputable others can be known.

Beliefs are justified by comparing evidence and opinion form different perspectives on an issue or across different contests and by constructing solutions that are evaluated by criteria such as the weight of the evidence, the utility of the solution, or the pragmatic need for action.

Knowledge is the outcome of a process of reasonable inquiry in which solutions to ill-structured problems are constructed. The adequacy of those solutions is evaluated in terms of what is most reasonable or probable according to the current evidence, and it is reevaluated when relevant new evidence, perspectives, or tools of inquiry become available.

Beliefs are justified probabilistically on the basis of a variety of interpretive considerations, such as the weight of the evidence, the explanatory value of the interpretations, the risk of erroneous conclusions, consequences of alternative judgments, and the interrelationships of these factors. Conclusions are defended as representing the most complete, plausible, or compelling understanding of an issue not the basis of the available evidence.

"It's very difficult in this life to be sure. There are degrees of sureness. You come to a point at which you are sure enough for a personal stance on the issue."

"One can judge an argument by how well thought-out the positions are, what kinds of reasoning and evidence are used to support it, and how consistent the way one argues on this topic is as compared with other topics."

**Extension:**

1) **In each stage, how do learners see:**

a. The Instructor:

b. Themselves:
c. Other Learners:

2) Instructional implications?