Linda Elder

biographical information

Dr. Linda Elder is an educational psychologist and a prominent authority on critical thinking. She is President of the Foundation for Critical Thinking and Executive Director of the Center for Critical Thinking. Elder has taught psychology and critical thinking at the college level and has given presentations to more than 20,000 educators at all levels. She has co-authored four books along with Richard Paul, including *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life, Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life* and *Twenty-Five Days to Better Thinking and Better Living*. She has co-authored twenty thinker's guides on critical thinking and co-authors a guarterly column on critical thinking in the Journal of Developmental Education.

Elder came to the Center and Foundation for Critical Thinking in 1994 after completing a doctorate in educational psychology from the University of Memphis. Her interest in critical thinking stems from her concern that most of the problems in human life are caused by problems in human thinking. Her primary concern is to contribute to a world that is more just, more fair, more humane, not just for the billions of people living on the planet but for other sentient creatures as well.

Elder began her professional career in 1983 at Youth Services, a non-profit organization concerned with helping troubled youth in Memphis avoid prison or juvenile detention. Through Youth Services she also taught independent living skills to low-income young adults. She then moved to Southwest Tennessee Community College to head up a program for displaced homemakers, which fostered skills of economic survival. Elder completed an MA degree in Psychology (1988) and the doctorate in 1990. After completing the doctorate, Elder began teaching psychology at the college level. It was at this time that she was introduced to critical thinking and began its study – in order primarily to reach her students at a deeper level.

Elder is now considered a leading authority on critical thinking internationally. One conceptualization of critical thinking written by Elder can be found on the Foundation for Critical Thinking websiteⁱ as follows:

Critical thinking is self-guided, self-disciplined thinking which attempts to reason at the highest level of quality in a fair-minded way. People who think critically consistently attempt to live rationally, reasonably, empathically. They are keenly aware of the inherently flawed nature of human thinking when left unchecked. They strive to diminish the power of their egocentric and sociocentric tendencies. They use the intellectual tools that critical thinking offers – concepts and principles that enable them to analyze, assess, and improve thinking. They work diligently to develop the intellectual virtues of intellectual integrity, intellectual humility, intellectual civility, intellectual empathy, intellectual sense of justice and confidence in reason. They realize that no matter how skilled they are as thinkers, they can always improve their reasoning abilities and they will at times fall prey to mistakes in reasoning, human irrationality, prejudices, biases, distortions, uncritically accepted social rules and taboos, self-interest, and vested interest. They strive to improve the world in whatever ways they can and contribute to a more rational, civilized society. At the same time, they recognize the complexities often inherent in doing so.

They avoid thinking simplistically about complicated issues and strive to appropriately consider the rights and needs of relevant others. They recognize the complexities in developing as thinkers, and commit themselves to life-long practice toward self-improvement. They embody the Socratic principle: *The unexamined life is not worth living*, because they realize that many unexamined lives together result in an uncritical, unjust, dangerous world.

Linda Elder has focused in her work primarily on the relationship between cognition and affect and is most interested in the barriers to the development of critical thinking, namely egocentric and sociocentric thinking.

The Stages of Critical Thinking Development

Elder has developed an original stage theory of critical thinking development which is briefly details as followsⁱⁱ:

Stage One: The Unreflective Thinker Stage Two: The Challenged Thinker Stage Three: The Beginning Thinker Stage Four: The Practicing Thinker Stage Five: The Advanced Thinker Stage Six: The Accomplished Thinker

Stage One: The Unreflective Thinker

Defining Feature: Unreflective thinkers are largely unaware of the determining role that thinking is playing in their lives and of the many ways that problems in thinking are causing problems in their lives. Unreflective thinkers lack the ability to explicitly assess their thinking and improve it thereby.

Knowledge of Thinking: Unreflective thinkers lack the knowledge that high quality thinking requires regular practice in taking thinking apart, accurately assessing it, and actively improving it. In fact, unreflective thinkers are largely unaware of thinking as such, hence fail to recognize thinking as involving concepts, assumptions, inferences, implications, points of view, etc. Unreflective thinkers are largely unaware of the appropriate standards for the assessment of thinking: clarity, accuracy, precision, relevance, logicalness, etc.

Skill in Thinking: Unreflective thinkers may have developed a variety of skills in thinking without being aware of them. However, these skills are inconsistently applied because of the lack of self-monitoring of thought. Prejudices and misconceptions often undermine the quality of thought of the unreflective thinker.

Stage Two: The Challenged Thinker

Defining Features: Thinkers move to the "challenged" stage when they become initially aware of the determining role that thinking is playing in their lives, and of the fact that problems in their thinking are causing them serious and significant problems.

Principal Challenge: To become initially aware of the determining role of thinking in one's life and of

basic problems that come from poor thinking.

Knowledge of Thinking: Challenged thinkers, unlike unreflective thinkers are becoming aware of thinking as such. They are becoming aware, at some level, that high quality thinking requires deliberate reflective thinking about thinking (in order to improve thinking). They recognize that their thinking is often flawed, although they are not able to identify many of these flaws. Challenged thinkers may develop an initial awareness of thinking as involving concepts, assumptions, inferences, implications, points of view, etc., and as involving standards for the assessment of thinking: clarity, accuracy, precision, relevance, logicalness, etc., though they have only an initial grasp of these standards and what it would take to internalize them. Challenged thinkers also develop some understanding of the role of self-deception in thinking, though their understanding is limited. At this stage the thinker develops some reflective awareness of how thinking operates for good or ill.

Skill in Thinking: Most challenged thinkers have very limited skills in thinking. However like unreflective thinkers, they may have developed a variety of skills in thinking without being aware of them, and these skills may (ironically) serve as barriers to development. At this stage thinkers with some implicit critical thinking abilities may more easily deceive themselves into believing that their thinking is better than it actually is, making it more difficult to recognize the problems inherent in poor thinking. To accept the challenge at this level requires that thinkers gain insight into the fact that whatever intellectual skills they have are inconsistently applied across the domains of their lives.

Relevant Intellectual Trait: The fundamental intellectual trait at this stage is intellectual humility, in order to see that problems are inherent in one's thinking.

Stage Three: The Beginning Thinker

Defining Feature: Those who move to the beginning thinker stage are actively taking up the challenge to begin to take explicit command of their thinking across multiple domains of their lives. Thinkers at this stage recognize that they have basic problems in their thinking and make initial attempts to better understand how they can take charge of and improve it. Based on this initial understanding, beginning thinkers begin to modify some of their thinking, but have limited insight into deeper levels of the trouble inherent in their thinking. Most importantly, they lack a systematic plan for improving their thinking, hence their efforts are hit and miss.

Principal Challenge: To begin to see the importance of developing as a thinker. To begin to seek ways to develop as a thinker and to make an intellectual commitment to that end.

Knowledge of Thinking: Beginning thinkers, unlike challenged thinkers are becoming aware not only of thinking as such, but also of the role in thinking of concepts, assumptions, inferences, implications, points of view, etc. Beginning thinkers are also at some beginning stage of recognizing not only that there are standards for the assessment of thinking: clarity, accuracy, precision, relevance, logicalness, etc., but also that one needs to internalize them and thus begin using them deliberately in thinking. They have a beginning understanding of the role of egocentric thinking in human life.

Skill in Thinking: Beginning thinkers are able to appreciate a critique of their powers of thought. Beginning thinkers have enough skill in thinking to begin to monitor their own thoughts, though as "beginners" they are sporadic in that monitoring. They are beginning to recognize egocentric thinking in themselves and others.

Relevant Intellectual Traits: The key intellectual trait required at this stage is some degree of intellectual humility in beginning to recognize the problems inherent in thinking. In addition, thinkers must have some degree of intellectual confidence in reason, a trait which provides the impetus to take up the challenge and begin the process of active development as critical thinkers, despite limited understanding of what it means to do high quality reasoning. In addition, beginning thinkers have enough intellectual perseverance to struggle with serious problems in thinking while yet lacking a clear solution to those problems (in other words, at this stage thinkers are recognizing more and more problems in their thinking but have not yet discovered how to systematize their efforts to solve them).

Stage Four: The Practicing Thinker

Defining Feature: Thinkers at this stage have a sense of the habits they need to develop to take charge of their thinking. They not only recognize that problems exist in their thinking, but they also recognize the need to attack these problems globally and systematically. Based on their sense of the need to practice regularly, they are actively analyzing their thinking in a number of domains. However, since practicing thinkers are only beginning to approach the improvement of their thinking in a systematic way, they still have limited insight into deeper levels of thought, and thus into deeper levels of the problems embedded in thinking.

Principal Challenge: To begin to develop awareness of the need for systematic practice in thinking.

Knowledge of Thinking: Practicing thinkers, unlike beginning thinkers are becoming knowledgeable of what it would take to systematically monitor the role in their thinking of concepts, assumptions, inferences, implications, points of view, etc. Practicing thinkers are also becoming knowledgeable of what it would take to regularly assess their thinking for clarity, accuracy, precision, relevance, logicalness, etc. Practicing thinkers recognize the need for systematicity of critical thinking and deep internalization into habits. They clearly recognize the natural tendency of the human mind to engage in egocentric thinking and self-deception.

Skill in Thinking: Practicing thinkers have enough skill in thinking to critique their own plan for systematic practice, and to construct a realistic critique of their powers of thought. Furthermore, practicing thinkers have enough skill to begin to regularly monitor their own thoughts. Thus they can effectively articulate the strengths and weaknesses in their thinking. Practicing thinkers can often recognize their own egocentric thinking as well as egocentric thinking on the part of others. Furthermore practicing thinkers actively monitor their thinking to eliminate egocentric thinking, although they are often unsuccessful.

Relevant Intellectual Traits: The key intellectual trait required to move to this stage is intellectual perseverance. This characteristic provides the impetus for developing a realistic plan for systematic practice (with a view to taking greater command of one's thinking). Furthermore, thinkers at this stage have the intellectual humility required to realize that thinking in all the domains of their lives

must be subject to scrutiny, as they begin to approach the improvement of their thinking in a systematic way.

Stage Five: The Advanced Thinker

Defining Feature: Thinkers at this stage have now established good habits of thought which are "paying off." Based on these habits, advanced thinkers not only actively analyze their thinking in all the significant domains of their lives, but also have significant insight into problems at deeper levels of thought. While advanced thinkers are able to think well across the important dimensions of their lives, they are not yet able to think at a consistently high level across all of these dimensions. Advanced thinkers have good general command over their egocentric nature. They continually strive to be fair-minded. Of course, they sometimes lapse into egocentrism and reason in a one-sided way.

Principal Challenge: To begin to develop depth of understanding not only of the need for systematic practice in thinking, but also insight into deep levels of problems in thought: consistent recognition, for example, of egocentric and sociocentric thought in one's thinking, ability to identify areas of significant ignorance and prejudice, and ability to actually develop new fundamental habits of thought based on deep values to which one has committed oneself.

Knowledge of Thinking: Advanced thinkers are actively and successfully engaged in systematically monitoring the role in their thinking of concepts, assumptions, inferences, implications, points of view, etc., and hence have excellent knowledge of that enterprise. Advanced thinkers are also knowledgeable of what it takes to regularly assess their thinking for clarity, accuracy, precision, relevance, logicalness, etc. Advanced thinkers value the deep and systematic internalization of critical thinking into their daily habits. Advanced thinkers have keen insight into the role of egocentrism and sociocentrism in thinking, as well as the relationship between thoughts, feelings and desires.

They have a deep understanding of the powerful role that thinking plays in the quality of their lives. They understand that egocentric thinking will always play a role in their thinking, but that they can control the power that egocentrism has over their thinking and their lives.

Skill in Thinking: Advanced thinkers regularly critique their own plan for systematic practice, and improve it thereby. Practicing thinkers regularly monitor their own thoughts. They insightfully articulate the strengths and weaknesses in their thinking. They possess outstanding knowledge of the qualities of their thinking. Advanced thinkers are consistently able to identify when their thinking is driven by their native egocentrism; and they effectively use a number of strategies to reduce the power of their egocentric thoughts.

Relevant Intellectual Traits: The key intellectual trait required at this stage is a high degree of intellectual humility in recognizing egocentric and sociocentric thought in one's life as well as areas of significant ignorance and prejudice. In addition the thinker at this level needs: **a)** the intellectual insight and perseverance to actually develop new fundamental habits of thought based on deep values to which one has committed oneself, **b)** the intellectual integrity to recognize areas of inconsistency and contradiction in one's life, **c)** the intellectual empathy necessary to put oneself in the place of others in order to genuinely understand them, d) the intellectual courage to face and fairly address ideas, beliefs, or viewpoints toward which one has strong negative emotions, e) the fair-mindedness necessary to approach all viewpoints without prejudice, without reference to one's

own feelings or vested interests. In the advanced thinker these traits are emerging, but may not be manifested at the highest level or in the deepest dimensions of thought.

Stage Six: The Accomplished Thinker

Defining Feature: Accomplished thinkers not only have systematically taken charge of their thinking, but are also continually monitoring, revising, and re-thinking strategies for continual improvement of their thinking. They have deeply internalized the basic skills of thought, so that critical thinking is, for them, both conscious and highly intuitive. They regularly raise their thinking to the level of conscious realization. Through extensive experience and practice in engaging in self-assessment, accomplished thinkers are not only actively analyzing their thinking in all the significant domains of their lives, but are also continually developing new insights into problems at deeper levels of thought. Accomplished thinkers are deeply committed to fair-minded thinking, and have a high level of, but not perfect, control over their egocentric nature.

Principal Challenge: To make the highest levels of critical thinking intuitive in every domain of one's life. To internalize highly effective critical thinking in an interdisciplinary and practical way.

Knowledge of Thinking: Accomplished thinkers are not only actively and successfully engaged in systematically monitoring the role in their thinking of concepts, assumptions, inferences, implications, points of view, etc., but are also regularly improving that practice. Accomplished thinkers have not only a high degree of knowledge of thinking, but a high degree of practical insight as well. Accomplished thinkers intuitively assess their thinking for clarity, accuracy, precision, relevance, logicalness, etc. Accomplished thinkers have deep insights into the systematic internalization of critical thinking into their habits. Accomplished thinkers deeply understand the role that egocentric and sociocentric thinking plays in the lives of human beings, as well as the complex relationship between thoughts, emotions, drives and behavior.

Skill in Thinking: Accomplished thinkers regularly, effectively, and insightfully critique their own use of thinking in their lives, and improve it thereby. Accomplished thinkers consistently monitor their own thoughts. They effectively and insightfully articulate the strengths and weaknesses inherent in their thinking. Their knowledge of the qualities of their thinking is outstanding. Although, as humans they know they will always be fallible (because they must always battle their egocentrism, to some extent), they consistently perform effectively in every domain of their lives. People of good sense seek out accomplished thinkers, for they recognize and value the ability of master thinkers to think through complex issues with judgment and insight.

Relevant Intellectual Traits: Naturally inherent in master thinkers are all the essential intellectual characteristics, deeply integrated. Accomplished thinkers have a high degree of intellectual humility, intellectual integrity, intellectual perseverance, intellectual courage, intellectual empathy, intellectual autonomy, intellectual responsibility and fair-mindedness. Egocentric and sociocentric thought is quite uncommon in the master thinker, especially with respect to matters of importance. There is a high degree of integration of basic values, beliefs, desires, emotions, and action.

The theoretical views of Linda Elder have been most strongly influenced by Richard Paul. Together Elder and Richard Paul have written many books and thinker's guides in what has been of late termed the *Paulian Tradition* of critical thinking, or Paulian critical thinking. The other primary theoretician in this tradition is Gerald Nosich. It is impossible to quantify the number of scholars, researchers and academicians who use the Paulian approach (also called the Paul-Elder model of critical thinking). What is clear is that it is widely recognized as a substantive and practical framework for critical thinking.

Books and thinkers guides written or coauthored by Linda Elder include:

Elder, L. & Paul. R. *The Aspiring Thinker's Guide to Critical Thinking*, Foundation for Critical Thinking, Dillon Beach, CA, 2009.

Elder, L. & Paul, R. *The Thinker's Guide: A Glossary of Critical Thinking Terms and Concepts*, Foundation for Critical Thinking, Dillon Beach, CA, 2009.

Elder, L. & Paul. R. *The Thinker's Guide to Analytic Thinking,* Foundation for Critical Thinking, Dillon Beach, CA, 2009.

Elder, L. & Paul, R. *The Thinker's Guide to Intellectual Standards*, Foundation for Critical Thinking, Dillon Beach, CA, 2008.

Elder, L. & Paul. R. *The Thinker's Guide to Intellectual Standards,* Foundation for Critical Thinking, Dillon Beach, CA, 2008.

Elder, L. & Paul. R. *The Miniature Guide to the Human Mind,* Foundation for Critical Thinking, Dillon Beach, CA, 2007, 3rd Ed.

Elder. L. *The Miniature Guide to Critical Thinking for Children,* Foundation for Critical Thinking, Dillon Beach, CA, 2006, 2nd Ed.

Elder, L. & Paul. R. *The Miniature Guide to the Art of Asking Essential Questions,* Foundation for Critical Thinking, Dillon Beach, CA, 2006, 4th Ed.

Elder, L. & Paul. R. 25 Days to Better Thinking and Better Living, Pearson Prentice Hall, Upper Saddle River, NJ, 2006.

Elder. L. Think About Fran and Sam, Foundation For Critical Thinking, Dillon Beach, CA, 2004.

Elder. L. *The Teacher's Manual for the Miniature Guide to Critical Thinking for Children,* Foundation for Critical Thinking, Dillon Beach, CA, 2002.

Hawkins, D., Elder, L. & Paul, R. *The Thinker's Guide to Clinical Reasoning*, Foundation for Critical Thinking, Dillon Beach, CA, 2006.

Niewoehner, R., Paul, R. & Elder, L. *The Thinker's Guide to Engineering Reasoning*, Foundation for Critical Thinking, Dillon Beach, CA, 2006.

- Paul, R. & Elder. L. *The Miniature Guide to Critical Thinking Concepts and Tools*, Foundation for Critical Thinking, Dillon Beach, CA, 2009, 5th Ed.
- Paul, R. & Elder. L. A Critical Thinker's Guide to Educational Fads, Foundation for Critical Thinking, Dillon Beach, CA, 2007.
- Paul, R. & Elder. L. *The Thinker's Guide for Students on How to Study and Learn a Discipline,* Foundation for Critical Thinking, Dillon Beach, CA, 2007.
- Paul, R. & Elder. L. *The Thinker's Guide to How to Write a Paragraph,* Foundation for Critical Thinking, Dillon Beach, CA, 2007.
- Paul, R. & Elder. L. *The Thinker's Guide to How to Read a Paragraph,* Foundation for Critical Thinking, Dillon Beach, CA, 2006, 2nd Ed.
- Paul, R. & Elder. L. *The Thinkers Guide to Fallacies: The Art of Mental Trickery and Manipulation,* Foundation for Critical Thinking, Dillon Beach, CA, 2006.
- Paul, R. & Elder. L. *The Thinker's Guide for Conscientious Citizens on How to Detect Media Bias and Propaganda*, Dillon Beach, CA, 2006, 3rd Ed.
- Paul, R. & Elder. L. *The Thinker's Guide to the Art of Socratic Questioning*, Foundation for Critical Thinking, Dillon Beach, CA, 2006.
- Paul, R. & Elder. L. *The Miniature Guide to Understanding the Foundations of Ethical Reasoning,* Foundation for Critical Thinking, Dillon Beach, CA, 2006, 2nd Ed.
- Paul, R. & Elder. L. *The International Critical Thinking Reading & Writing Test*, Foundation for Critical Thinking, Dillon Beach, CA, 2006.
- Paul, R. & Elder. L. *Critical Thinking: Tools for Taking Charge of Your Learning and Your Life, Second Edition*, Prentice Hall, Upper Saddle River, NJ, 2006, 2nd Ed.
- Paul, R. & Elder. L. A Miniature Guide to For Those Who Teach on How to Improve Student Learning, Foundation for Critical Thinking, Dillon Beach, CA, 2006.
- Paul, R. & Elder. L. *A Miniature Guide for Students and Faculty to Scientific Thinking,* Foundation for Critical Thinking, Dillon Beach, CA, 2006, 2nd Ed.
- Paul, R. & Elder. L. A Guide for Educators to Critical Thinking Competency Standards, Foundation for Critical Thinking, Dillon Beach, CA, 2006.
- Paul, R. & Elder. L. *Critical Thinking: Learn the Tools the Best Thinkers Use (Concise Edition),* Upper Saddle River, NJ, 2006.
- Paul, R. & Elder. L. *The Thinker's Guide to the Nature and Functions of Critical and Creative Thinking,* Foundation for Critical Thinking, Dillon Beach, CA, 2005.

Paul, R. & Elder. L. *Critical Thinking: Tools for Taking Charge of Your Professional and Personal Life,* Prentice Hall, Upper Saddle River, NJ, 2002.

Links:

www.criticalthinking.org www.everyonethinks.org

ⁱ Taken from the following link at the website of the Foundation for Critical Thinking: http://www.criticalthinking.org/aboutCT/define critical thinking.cfm

ⁱⁱ Taken from the following link on the website of the Foundation for Critical Thinking: http://www.criticalthinking.org/articles/ct-development-a-stage-theory.cfm