Critical Thinking: Competency Standards Essential to the Cultivation of Intellectual Skills, Part 5

By Richard Paul and Linda Elder

In the last four columns we introduced the concept of critical thinking competency standards and elaborated a number of such standards, targeting the analysis of thought, the assessment of thought, and the cultivation of intellectual virtues. In this column we focus on three subject-specific critical thinking competency standards.

It is essential for students to learn generalizable intellectual skills, such as those covered in the first four columns, for they need these skills to effectively take thinking apart and determine the quality of that thought, in any context. But, further, students need to develop subject-specific skills such as standards focused on close reading, substantive writing, and ethical reasoning. Naturally, there will be considerable overlap between generalizable critical thinking skills, abilities, and traits and subject specific ones. We invite scholars in all fields of study to contribute to the articulation of these subject-specific critical thinking standards.

Standard One: Skills in the Art of Close Reading

Students who think critically read texts worth reading and take ownership of the most important ideas in texts.

Critical Thinking Principle

To become critical thinkers, students must read texts closely and, through that process, identify and apply the most important ideas in them (Paul & Elder, 2008).

Performance Indicators and Dispositions

Students who think critically routinely read in texts that are significant and thus expand their worldview. Recognizing that every text has a purpose, they clarify the purposes of texts as they read. Recognizing that close reading requires active engagement in reading, they create an inner dialog with the text as they read: questioning, summarizing, and connecting important ideas with other important ideas.

Outcomes

1. Students reflect as they read.
2. Students monitor how they are reading as they are reading, distinguishing between what they do and do not understand in the text.
3. Students accurately summarize and elaborate texts (in their own words) as they read.
4. Students give examples, from their experience, of ideas in texts.
5. Students connect core ideas in a text to other core ideas they understand.
6. Students take the core ideas they internalize through reading and apply them to their lives.
7. Students accurately paraphrase what they read (e.g., sentence by sentence).
8. Students accurately and logically explicate the thesis of a paragraph.
9. Students analyze the logic of what they read (its purpose, its main question, the information it contains, its main idea, etc.)
10. Students evaluate what they read (for clarity, accuracy, precision, relevance, depth, breadth, logic, and significance).
11. Students accurately role-play an author’s viewpoint as presented in a text.

Standard Two: Skills in the Art of Substantive Writing

Students who think critically write papers that say something worth saying about something worth addressing.

Critical Thinking Principle

Critical thinkers are able to write in such a way as to express something substantive and understand the importance of writing to learning (Paul & Elder, 2006a).

Performance Indicators and Dispositions

Students who think critically use writing as an important tool both for communicating important ideas and learning. They use writing to deepen their understanding of important concepts and to clarify interrelationships between concepts. In writing, they are able to clearly and accurately analyze and evaluate ideas in texts and their own thinking. In other words, they use writing as an important tool for learning ideas deeply and permanently.

Outcomes

1. Students reflect as they write.
2. Students monitor how they are writing as they are writing, distinguishing between what they do and do not understand in the text.
3. Students accurately summarize (in their words) texts they read or ideas they hear.
4. Students routinely give examples from their experience as they write to exemplify important ideas.
5. Students explicitly connect core ideas to other core ideas as they write.
6. Students write about ideas that apply to their lives.
7. Students demonstrate the ability to explicate in writing the thesis they are developing or defending.
8. Students demonstrate the ability to clearly and accurately analyze, in writing, the logic of concepts in a text, chapter or academic subject.
9. Students consistently use universal intellectual standards in their writing, routinely checking their writing for clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness.
Standard Three: Ethical Reasoning Abilities

Students who think critically learn to identify ethical issues and reason well through ethical questions.

Critical Thinking Principle

Critical thinkers recognize that one cannot be an ethical person unless one learns to reason well through ethical questions, issues, and situations. The proper role of ethical reasoning is to highlight acts of two kinds: those that enhance the well-being of others—that warrant praise—and those that harm or diminish the well-being of others—and thus warrant criticism. Developing one's ethical reasoning abilities is crucial because there is in human nature a strong tendency toward egotism, prejudice, self-justification, and self-deception. These tendencies are exacerbated by powerful (self-serving) cultural influences. The ultimate basis for ethical reasoning is clear: Human behavior has consequences for the welfare of others (Paul & Elder, 2006b).

Performance Indicators and Dispositions

Students who think critically are able to identify ethical questions, issues, and situations and then reason well through them. They manifest a commitment to a common core of ethical principles: Everyone has an ethical responsibility to respect the rights of others, including their freedom and wellbeing, to help those most in need of help, to seek the common good, and to strive in some way to make the world more just and humane. They recognize the powerful forces of egocentric and sociocentric thought in human life and actively work to diminish these forces in their own thoughts and behavior. In other words, they realize that many ethical issues are complex, necessitating interrelated skills of mind that must be developed and cultivated. They understand the importance of distinguishing ethics from religion, social conventions, and the law and of keeping these distinctions clearly in mind when reasoning through ethical issues.

Outcomes

1. Students demonstrate understanding of ethical reasoning, by accurately elaborating and exemplifying that reasoning.
2. Students demonstrate awareness of the fact that ethics is often confused with very different modes of thinking and take pains not to confuse ethical reasoning with reasoning in different, though related, categories. They distinguish ethical thinking from religious thinking (based on theology), conventional thinking (based on social conventions and taboos), political thinking (based on ideology and vested interest), and legal thinking (based on political processes and social pressures).
3. Students can accurately identify fundamental human rights.
4. Students demonstrate understanding that ethical principles are based in the rights of humans and other sentient creatures.
5. Students can accurately articulate universal human and animal rights.
6. Students can accurately determine when human or animal rights are being violated.
7. Students demonstrate the propensity to honor universal human and animal rights.
8. Students recognize that there is a logic to ethical reasoning, just as there is a logic to mathematical, scientific, and medical reasoning, and can accurately articulate that logic.
9. Students demonstrate, in reasoning through ethical issues, that ethical reasoning must meet the same intellectual standards that apply to other domains of knowledge (i.e., be clear, accurate, precise, relevant, logical, deep, nontrivial, and fair).
10. Students distinguish between simple ethical questions (which have a finite answer) and complex ones (that require reasoned judgment).
11. Students identify all of the significant facts relevant to an ethical question and consider those facts fairly.
12. Students put themselves imaginatively in the place of others and recognize how they would think and feel if someone were to act toward them as they are acting toward others.
13. Students demonstrate awareness of the fact that ethical reasoning entails doing what is right even in the face of powerful selfish desires.
14. Students demonstrate understanding of the fact that much ethical insight comes from recognizing inconsistencies in human behavior.
15. Students can accurately state, elaborate, and exemplify acts that are unethical in-and-of-themselves. They do not confuse these with acts deemed unethical by society, the law, or religious groups. They use intellectual standards, ethical principles, and knowledge of the relevant facts to determine whether an act is ethical or unethical.

Conclusion

Critical thinking, or criticality, is usually presupposed within academic subjects and disciplines. Yet, though much critical thought occurs within subjects and fields, and though all subjects and disciplines presuppose the core tenets of critical thinking, actual thought and practice within fields of study is often flawed. One significant reason for this is that the critical thinking implicit in given subjects and disciplines is frequently kept at the tacit level, rather than being made explicit. When thinking is not made explicit, even in academic disciplines, flawed reasoning can easily go undetected. It is important to first make thinking within the disciplines explicit and then assess the thinking to see if it makes sense in context. Viewing the disciplines in this way highlights the importance of bringing what is implicit in thought to the explicit level. Further, in order for students to learn to think within the disciplines, mentors need to articulate and develop subject-specific critical thinking standards within various fields of study.

References


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suggested strategic methods and/or programs needed to assist students with achieving academic success. The most important findings were the significance of financial educational assistance, mentorship programs, tutoring programs, increased staff to support students, and working toward building an inclusive environment for all students. These findings and implications of the study are harmonious with previous recommendations and programs (Boening & Miller, 2005; Scott & Homant, 2007; Ulloa & Herrera, 2006), and they have reaffirmed that higher education institutions must continue their