CHAPTER 3

DEVELOPING CRITICAL THINKING

ABSTRACT

The role that human critical thinking skills play in daily life grows as AI further integrates into our lives. This chapter analyzes the necessary tools to effectively sail through this information age. It does this by describing useful strategies for the formation of sharp analytical skills and the development of strong critical thinking, which will help students critically evaluate information in today's complex cyber world.

This chapter covers some concrete techniques of questioning assumptions and the examination of information in an unbiased way. It will also show you a proper method of detection with bias, together with how to evaluate evidence efficiently, enabling you to make good arguments based on verifiable facts. Beginning with a firm emphasis on critical thinking, this chapter is going to help you become an effective consumer of information in the digital age.

With studies that illustrate the practical application of those strategies in real-life scenarios, this chapter providing an example of critical thinking in action and how one should analyze information, recognize biases, and make informed decisions in various contexts.

The chapter further explores the exercises that will put critical thinking into practice. These exercises can be utilized for use in the classroom or even for the self-learner desiring to

By Yang Li

© CSMFL Publications & its authors

DOI: https://dx.doi.org/10.46679/9788196780586ch03

THIS IS A LIMITED PREVIEW OF THE CHAPTER.

To read the full-text chapter, get access by purchasing this chapter or consider buying the complete book. If your library has subscription to EBSCOhost, this chapter including other chapters of the book can be accessed through your library.

This chapter is a part of the book, 'Human Skills for the Automated Future: Being Human as the Key Eligibility for Future Workplaces' by Yang Li.

ISBN: 978-81-967805-8-6 (ebk); ISBN: 978-93-49926-23-3 (pbk)

The ebook (ebk) and paperback/softcover print (pbk) of this book is available at: https://dx.doi.org/10.46679/9788196780586

The book and its metadata are available worldwide via EBSCOhost Academic Collection, EBSCO E- books, Google Books, Google Play Books, World Cat Discovery Service/OCLC, Crossref Metadata Search, CSMFL Bookstore, and other leading book resellers and academic content vendors.

- Students take turns reaching into the box without looking and feeling the object.
- Based on their sense of touch alone, they must describe the object and brainstorm its possible uses.
- After each guess, reveal the object and discuss the accuracy of their observations and the different uses they came up with.
- This exercise encourages critical thinking through observation, deduction, and creative problem-solving.

3.2.5. The Persuasive Paradox (All Grades)

- Present a controversial statement related to your subject matter (e.g., "Homework should be abolished").
- Divide the class into two groups, with each side assigned to argue for or against the statement.
- The twist: Students must argue for the opposing side! This forces them to analyze all sides of an issue, identify logical fallacies, and construct well-reasoned arguments even for positions they might not agree with.

Students develop reasoning through direct engagement in analysis and questioning. Class discussions become more dynamic when students practice these mental tools, which also prepare them for their professional paths.

Education needs these mental exercises now more than ever. Today's students face an AI-shaped world, yet they possess distinct human capabilities that remain essential. Teachers who emphasize analytical thinking create tomorrow's independent thinkers and problem-solvers.

REFERENCES

Campbell, M. (2024, June 1). *Key Strategies for Enhancing Analytical Problem Solving Skills*. Growth Tactics. https://www.growthtactics.net/key-strategies-for-enhancing-analytical-problem-solving-skills/

- Cannon, C., & Pherson, R. (n.d.). *Critical Thinking in Action: Case Solutions*. https://us.sagepub.com/sites/default/files/upm-assets/114762_book_item_114762.pdf
- Cote, C. (2021, January 7). *How to Improve Your Analytical Skills* | *HBS Online*. Business Insights Blog; Harvard Business School, Online. https://online.hbs.edu/blog/post/how-to-improve-analytical-skills
- February 25, K. F. on. (2020, February 25). *5 Critical Thinking Activities That Get Students Up and Moving*. We Are Teachers. https://www.weareteachers.com/critical-thinking-activities/
- Lee, S., Choi, D., Lee, M., Choi, J., & Lee, S. (2023). Fostering Youth's Critical Thinking Competency About AI through Exhibition. *ACM Digital Library*. https://doi.org/10.1145/3544548.3581159
- Misechko, O., & Lytniova, T. (2022). FROM CRITICAL THINKING TO CREATIVITY: STEPS TO UNDERSTANDING. *Zhytomyr Ivan Franko State University Journal. Pedagogical Sciences*, *2*(109), 5–15. https://doi.org/10.35433/pedagogy.2(109).2022.5-15
- Moustaghfir, S., & Brigui, H. (2024). Navigating Critical Thinking in the Digital Era: An Informative Exploration. *International Journal of Linguistics, Literature and Translation*, 7(1), 137–143. https://doi.org/10.32996/ijllt.2024.7.1.11x
- Qi, L. (2019). The Critical Thinking Ability Culitivating in College English Course in the Artificial Intelligent Age. *Frontiers in Educational Research*, *2*(5). https://doi.org/10.25236/fer.034037
- Yussif. (2024, March 6). How to Teach and Develop Critical Thinking of Your Students in the Classroom Classroom Management Expert. Classroommanagementexpert.com; Classroom Management Expert. https://classroommanagementexpert.com/blog/how-to-

Human Skills for the Automated Future

teach-and-develop-critical-thinking-of-your-students-in-the-classroom/

•