## SoTL In Process

# Critical Thinking in the Humanities: An Exploration of Student Perspectives

## **ABSTRACT**

This study explores the perception of critical thinking (CT) among students in undergraduate humanities programs. It uncovers a strong alignment between the learning objectives of CT within the curriculum and students' perceptions. Students not only recognize CT but also underscore its importance, affirming their perceived improvement in critical thinking skills throughout their academic pursuits. However, this preliminary study also shows that there are reasons to suppose that there is a disparity between how students experience critical thinking in their academic environment and how they value, define, and experience its importance in relation to their personal values. They seem to advocate for a conception of CT that stands for a disposition of criticality, extending beyond the confines of skill acquisition. These findings provide an important indication that there are strong signs of a significant disparity between the learning objectives students wish to achieve and how these objectives are currently being delivered. The proposed shift in focus from skill acquisition to nurturing moral and critical engagement with the world brings up new inquiries that require further exploration. These insights contribute to the ongoing discourse on the role and implementation of CT in humanities education, offering a fresh perspective on the multifaceted nature of CT and its implications for higher education.

# **KEYWORDS**

critical thinking, humanities, student perspectives, higher education

## INTRODUCTION

The development of students' critical thinking (CT) competencies is a fundamental educational objective (Billings and Roberts 2014; Facione and Facione 2013; Crenshaw, Hale, and Harper 2011). Particularly within humanities programs, CT is often perceived as a distinct competency of graduates (Dumitru 2019; Small 2013). Some even consider it the *raison d'être* of humanities education (Frykholm 2021). Nussbaum (2016) posits that while critical thinking is not exclusive to the humanities, it is most effective in the sciences and social sciences when they adopt the "spirit of the humanities" (Nussbaum 2016).

Given the fundamental role of CT in humanities education, this study explores how students pursuing a humanities education value, define, and experience CT as a learning outcome. Specifically, we investigate whether students recognize that critical thinking is taught in their program and how they perceive it. We delve into their views and experiences of critical thinking as a learning goal and examine how they relate it to their academic and personal ambitions.

Our discipline-specific approach to this question is inspired by previous research which revealed that the discipline has a profound impact on shaping assumptions around the importance of critical thinking (Tapper 2004). Further, it has been found that students in the humanities, much more

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than those in the field of science and technology, are encouraged at an earlier stage to cultivate a critical perspective towards course materials (Clarke and Biddle 1993; Yager 1996).

Despite the considerable amount of research dedicated to defining CT and refining teaching methods in higher education, there is a noticeable gap in studies investigating students' understanding and recognition of CT. Students' perspectives on CT could considerably impact the effectiveness of CT instruction and/or development. Enhancing our understanding of how students value, define, and experience CT could pave the way for curriculum advancements by aligning teaching activities and evaluations with students' understandings of the expected learning outcomes (Biggs and Tang 2015). Previous studies have demonstrated that strong alignment fosters favorable attitudes toward critical thinking instruction, and this alignment is correlated with an elevated level of critical thinking (Loes, Salisbury, and Pascarella 2015).

This study involved 33 undergraduate students from various humanities disciplines, including languages and communication, philosophy and religion, history, and media and culture. All students were from the Faculty of Humanities at Utrecht University, a European research university. The faculty prioritizes fostering critical thinkers. This is reflected in its strategic plans, which outline the objective of educating well-rounded, critical, and socially engaged students. Similarly, the learning outcomes of individual programs emphasize the importance of CT. For instance, communication program graduates are expected to "critically analyze the media's societal role," historians must be able to "critically reflect on the past" and philosophy students, upon graduation, should be "equipped to form independent judgments through critical thinking" (Utrecht University 2024).

While these descriptions highlight the importance of CT, they leave significant room for students to develop their own understanding of the concept and its purpose. This openness regarding the definition and curricular integration of CT prompted us to design a survey that aims to assess students' comprehension of critical thinking, its significance in their academic pursuits, and its applicability to their personal lives. The survey comprised open-ended questions, providing students with the opportunity to expand on their perspectives and experiences. We employed a combination of descriptive statistical analysis and qualitative interpretation of responses to the open-ended questions for data analysis. This approach enabled us to address the following research questions: How do students conceptualize critical thinking? Do they identify it as a learning goal in their education? How do they associate critical thinking with their academic and personal goals?

## **Critical thinking**

The concept of critical thinking has evolved within various academic traditions, including philosophy and psychology (Lewis and Smith 1993). Since the 1980s, particularly within the United States, there has been a surge of interest in CT in education due to significant concern about whether the education system was providing students with the necessary tools to develop their critical thinking skills (Arum and Roksa 2011). This has resulted in educational research reflecting on our understanding of critical thinking (Geng 2014; Sanders and Moulenbelt 2011), as well as exploring methods to teach it (Davies 2015; Hitchcock 2015; Sternberg 1986; ten Dam and Volman 2004).

One of the most influential frameworks for understanding critical thinking in the context of education, particularly higher education, is Bloom's Taxonomy. Developed in 1956, this taxonomy organizes cognitive skills into six levels ranging from lower-order to higher-order thinking. The higher-order levels, which encompass analysis, synthesis, evaluation, and creation, are considered indicators of critical thinking (Bloom 1956).

The enduring reference to Bloom's taxonomy underscores the widely accepted belief that critical thinking involves a distinct set of skills. Efforts have been made to measure and evaluate

critical thinking by identifying these specific skills (Ennis 1985). By defining skills that determine the proficiency in CT, it becomes possible to assess the student's capacity for critical thinking. However, in the debate about critical thinking as a learning outcome, it is frequently underscored that critical thinking goes beyond just cognitive skills.

# Disposition of criticality

The notion that critical thinking encompasses more than just a set of skills is recurrent in the debate on critical thinking (Bailin and Battersby 2016; Billings and Roberts 2014; Ennis 1985; Facione 1990; Facione and Facione 2013; Facione, Facione, and Giancarlo 2000; Fisher 2011; Paul 1991; Popkewitz and Fendler 1999). Robert Ennis (1985) characterized it as an ambition: "We must transcend Bloom's taxonomy to consider the specific dispositions and abilities that define critical thinkers." He further identified competencies, such as open-mindedness, fairness, a propensity for rational inquiry, curiosity, a desire for comprehensive knowledge, adaptability, and respect for diverse perspectives (Ennis 1985).

Therefore, education in critical thinking should not be limited to skills training, but it should also aim to cultivate critical individuals who not only practice critical reasoning but have also internalized a disposition of criticality. These dispositions, Ennis suggests, can be nurtured and enhanced through education and practice. As such, the virtue of critical thinking is not a static or innate quality, but a dynamic and learnable one. In addition to the question of what CT is, the question can also be asked what CT can be used for. Informed by a discipline-specific approach, we adopted Herman Paul's tripartite model of critical thinking (CT) in the humanities (Paul 2021). Paul identifies three modes of critical thinking within the discipline: philological criticism, logical criticism, and ideological criticism. Philological criticism focuses on the evaluation of the relative trustworthiness of (historical) texts. Logical criticism, in contrast, scrutinizes the soundness of arguments presented. Finally, ideological criticism delves into the ways that underlying ideologies shape our thoughts, emotions, and actions, thereby serving to perpetuate social structures and power dynamics (Paul 2021).

The findings from the research into defining CT are instrumental to answering our question about the perceptions of humanities students regarding critical thinking as a learning goal in their education. They provide an explanatory framework for how students define CT, which aspects of CT they recognize in their education, and the importance they attribute to being competent in CT.

## **METHOD**

To answer questions about how students value, define, and experience what CT is, whether they recognize it in education, and what role it plays for them academically and personally, we embarked on the following exploratory study.

# **Participants and procedure**

An invitation was sent through email to over 300 full-time second-year bachelor students studying within the Faculty of Humanities. Approximately 10 percent of the invited students responded, ultimately resulting in 33 fully completed questionnaires. The participants, all full-time students between the ages of 18 and 25, were mostly Dutch-speaking (28 out of 33) and completed the survey in Dutch. The remaining five completed the survey in English. These students represented a diverse array of specializations within the faculty, providing a comprehensive sampling of perspectives. For the purposes of this study, the Dutch responses were translated into English by the authors of this article. Participation in the study was facilitated through the completion of an online

questionnaire, a process designed to allow students to use a device of their choosing. Furthermore, participants were given the flexibility to choose between completing the questionnaire in English or Dutch, with both versions being identical in content. Students were not provided any form of compensation for completing the survey.

Prior to engaging in the study, students received detailed information outlining the purpose, procedures, and expectations of participation. This pre-participation phase ensured that students were well-informed about the study's scope and nature. Subsequently, students explicitly consented to be part of the study before filling out the questionnaire.

It is important to underscore the ethical considerations associated with the study. The research design and implementation received approval from the ethical review board of the humanities faculty at Utrecht University. The details of this approval, including specific information, have been withheld to maintain anonymity during the peer review process.

## **Materials**

The online questionnaire, central to our research, comprised a total of 16 questions designed to elicit nuanced insights from the participating students. The survey initiation featured an openended query, prompting students to articulate their interpretation of the faculty of humanities' objective in cultivating critical thinkers. Notably, respondents were instructed to restrict their response to a concise 50 words to ensure comparability among responses, prevent lengthy essays that would make analysis unmanageable, and encourage respondents to be concise. This helped maintain the quality and consistency of the data collected, facilitating a more efficient and effective analysis.

Subsequently, the questionnaire transitioned to a Likert scale format for the second segment. Students were presented with statements to which they could respond on a six-point scale, ranging from strongly disagree to strongly agree. This section encompassed two inquiries addressing critical thinking as a motivating factor in selecting their enrolled bachelor program. Furthermore, six statements delved into the manifestation of critical thinking within their bachelor program, accompanied by two open-ended follow-up questions seeking insights into how critical thinking was explained and put into practice during lectures and tutorials.

Expanding on the exploration of critical thinking, students were asked to rank three statements based on what they thought was most important in their program. For this, we used the previously discussed tripartite model of critical thinking (CT) in the humanities (Paul 2021). The three ranked statements were:

In my bachelor program, critical thinking is mainly about the ability . . .

- To test whether the source of information (such as a document, person, or photo) used to obtain knowledge is valid, reliable, or relevant.
- To test the logic of the argumentation behind a statement.
- To expose power relations that perpetuate injustices in the world.

Finally, they were asked to rank these same three statements in order of importance for themselves: In my personal opinion, critical thinking is mainly about the ability . . . The questionnaire ended with several demographic questions.

This structured approach aimed to capture a comprehensive spectrum of perspectives, encompassing both qualitative and quantitative responses. By blending open-ended inquiries with Likert scale assessments, the questionnaire sought to extract rich and varied insights into students'

perceptions and experiences related to critical thinking within the academic context of the faculty of humanities.

# **Analysis**

The primary objective of our analysis was to develop a preliminary understanding of how students value, define, and experience critical thinking (CT). The formulation of the questionnaire was guided by this overarching goal. Instead of focusing solely on obtaining statistically significant results, our aim was to discern emerging trends or patterns within the responses, recognizing the inherent limitations of working with a relatively small participant pool.

The analysis of the data collected through the questionnaire unfolded through a dual-faceted approach. The first facet centered on the scrutiny of quantitative data, allowing us to ascertain whether a particular viewpoint enjoyed unanimous agreement, or garnered majority support. Given the size of our respondent group, we were able to derive valuable insights into the prevailing perceptions of CT among students. While these insights cannot be quantitatively validated, the findings offer a significant overview of the respondents' attitudes and opinions, thereby enhancing our understanding of student perspectives on CT.

The second facet of our analytical approach delved into the qualitative interpretation of responses to open-ended questions. This qualitative aspect proved indispensable in cultivating a comprehensive understanding of students' nuanced perceptions of CT. By synthesizing statistical data with personal insights, we facilitated a more profound exploration of the subtleties inherent in students' perspectives. This qualitative analysis underscored how individual viewpoints enhanced our comprehension of CT, surpassing the confines of what quantitative measures alone can capture.

## **FINDINGS**

# Students' definition of critical thinking

The responses to the open-ended question about defining CT indicated that participants included a range of skills in their definitions. These skills align with the common notion of the necessary abilities for critical thinking. They include the ability to "evaluate and value information," "distinguish objective knowledge from subjective knowledge," and "engage with information while actively seeking to understand its purpose, method, and origin" and "not simply accept information as truth but pay attention to the source and background of/influences on the information." A recurring theme in these descriptions of skills associated with critical thinking is the mention of the ability to adopt diverse perspectives and, in doing so, recognize the relativity of one's own truth: Critical thinkers "always approach matters from multiple points of view," "are open to different perspectives," or "seek different perspectives on the problem in order to form their own picture and make a decision."

The ability to adopt different perspectives is not so much described as a skill, but as a manifestation of courage, as expressed by the willingness to "dare to think beyond what is the norm"; "dare to go against the current on the basis of good arguments"; "dare to be wrong"; "dare to question certain dogmas and statements and not always go along with what is the norm"; or to "not [be] afraid to be wrong, to admit it even if it means accepting unpleasant concepts or ideas."

# Critical thinking in education

When asked if students recognize critical thinking as a learning objective in their education, the response was unanimously positive, with most citing it as one of the reasons to pursue a university degree in the humanities. For the majority, the methods for enhancing their critical thinking skills during their education were evident, and they all indicated that they were assessed on their

proficiency in critical thinking. Additionally, almost all respondents emphasized the necessity of being proficient in critical thinking to successfully complete their bachelor's program.

# The practice of critical thinking in class

Student responses to the statement "During tutorials and/or lectures it is explained how to think critically" varied. While a majority agreed or strongly agreed, there were also students who indicated only slight agreement. A few even disagreed with the statement. Nevertheless, a majority affirmed their active engagement in critical thinking practices during class sessions. These practices encompassed a range of activities, including "writing literature reviews," participating in "discussions with peers and teachers"—particularly on topics such as "the relevance and reliability of sources and their relation to the problem"—and "responding to reflective questions posed by the teacher about the texts." When asked about the methods employed, students cited exercises such as text analysis, source interpretation, and comparison of diverse viewpoints.

# Ranking statements on the importance of critical thinking

Students were asked to rank three statements about critical thinking in terms of importance for their bachelor's program and for themselves. The findings revealed a distinct contrast between the students' perception of critical thinking in their academic program and their personal values. In the context of their bachelor's program, students experienced critical thinking primarily as a skills-based concept. They ranked "testing the validity, reliability, or relevance of information sources (such as documents, people, or photos)" as the most important aspect.

Conversely, they considered "exposing power relations that perpetuate injustices in the world" as the least important in their program. However, when reflecting on their personal values, students shifted their focus from skills to the moral implications of knowledge construction. They deemed "exposing power relations that perpetuate injustices in the world" as the most important aspect of critical thinking for themselves. Interestingly, they ranked "testing the validity, reliability, or relevance of information sources" as the least important. These results highlight a clear disparity between how students experience critical thinking in their academic environment and how they value, define, and experience its importance for their personal values.

## **DISCUSSION**

Our research sought to explore the multifaceted dimensions of critical thinking (CT) within the humanities at a higher education institution. Specifically, we aimed to understand how students conceptualize CT, recognize its presence in their program, and discern the roles it plays both academically and personally. We are aware that the design of this study, which focuses on better understanding how critical thinking is understood by students and how it is presented, does not allow us to make definitive claims. The quantitative portion of the study was limited by the number of respondents, and the open-ended questions offered little room for elaboration. Furthermore, the voluntary nature of participant recruitment may have introduced bias, and the options provided in the ranking were inherently restrictive and certainly not exhaustive due to the nature of this study. However, for the purpose of this research, the questionnaire was a functional instrument to begin examining the ways in which students acknowledge critical thinking (CT) as a significant learning objective within their academic programs, with considerable importance for the successful completion of their studies and for their future pursuits. Moreover, students express a favorable perception of their advancement in critical thinking during their educational experiences. This alignment is evident in students' acknowledgment of the learning outcome, its instructional methods,

and its significance in shaping their intellectual growth. However, the findings also indicate a disparity between students' experiences of critical thinking (CT) in the academic environment and their perception of its importance in relation to their academic goals and personal values. When asked about CT teaching methods, students primarily offered examples of skill-based exercises. The students' assumption that CT education focuses mainly on skills was further reinforced by their ranking of different statements. Philological criticism was ranked as the most important for their program, followed by logical criticism, with ideological criticism ranked last.

This emphasis on skills stands in stark contrast to students' personal views on what CT should entail. Based on how students described CT in the survey, they see the exposure of power dynamics that perpetuate social injustice as CT's primary objective. Their responses consistently highlighted competencies that transcend mere skills, emphasizing a moral attitude characterized by openmindedness, fairness, courage, and acceptance as core aspects of CT. In other words, beyond skills such as source criticism and coherent argumentation, students describe CT as encompassing a specific attitude—one marked by openness to criticism, a willingness to "dare to be wrong," and an insistence on "not settling for simple answers." This nuanced perspective suggests a holistic, internalized disposition towards criticality that extends beyond the acquisition of skills.

The identified misalignment between the perceived role of CT in the curriculum and students' expectations raises interesting questions. Should we revise our curriculum and the role of CT in it? Should we reconsider how we teach CT and integrate it into the curriculum? In response, the emphasis could shift, for example, from skill acquisition to the cultivation and enhancement of a critical attitude through education and practice. However, a shift from an emphasis on imparting skills to nurturing moral and critical engagement with the world in turn raises new questions on how we have designed our curriculum. Firstly, is it desirable for a university education to adopt an ideological position? While science traditionally values objectivity, addressing issues of inequality and injustice necessitates a moral stance. The core issue underlying this question is the assumed conflict between normative (moral) statements and objectivity, considered problematic by scholars such as Behari-Leak (2020). She argues that this distinction, rooted in colonial thinking, hinders diverse knowledge production and higher education's role in inclusivity and social justice (Behari-Leak 2020). This critique extends to another question: can critical thinking be objectively assessed? Felten and Geertsema raise concerns that prioritizing objectivity might neglect ethical and social impact considerations (Felten and Geertsema 2023). In other words, should the potentially subjective nature of measuring criticality prevent utilizing higher education to build a just and equitable society? If the answer to this question is yes, then the next question may be whether lecturers in humanities programmes, which aim to foster moral and critical engagement with the world, need to agree on the specific injustices in the world. While consensus can foster unified teaching, collaboration, and shared vision, its uncritical acceptance can be detrimental. On the other hand, higher education should be the place where ideas, opinions, and beliefs can clash in a productive way. It can be argued that the very diversity of moral insights is a precondition for a curriculum aiming for moral and critical engagement with the world.

## **CONCLUSIONS**

There are several areas that could be explored in further research. One area is the feasibility and implications of revising the curriculum to emphasize the cultivation of a critical attitude, rather than a focus on skill acquisition. This could involve a comparative study of curricula that have successfully incorporated this approach. Another area is the potential benefits and drawbacks of adopting an ideological position within university education. This could involve exploring how to

balance the traditional value of objectivity in science with the need, and, according to some necessity, especially in the humanities, to address societal injustices.

Further research could also develop and validate reliable methods for assessing such a disposition of criticality. This might involve designing rubrics or other assessment tools that can measure students' critical attitudes without unduly influencing their development. Additionally, it would be beneficial to investigate whether consensus within a humanities program regarding the injustices to be addressed and the ideological perspectives to adopt enhances or stifles free thinking and diverse opinions. In other words, how explicit can and may a teacher be in their own ideological views, and to what extent should there be consensus on this among the faculty?

Lastly, research could explore how the skills associated with CT can be harnessed to combat societal injustices. This could involve case studies of instances where CT has been effectively used for this purpose. These ideas for future research may provide valuable insights into the role and teaching of CT in higher education, particularly within the humanities. They could also inform future curriculum development and pedagogical practices. Given that this exploratory research has prompted us to consider whether and how a shift from an emphasis on skills to fostering moral and critical engagement with the world is necessary, we intend to follow up this study with a series of semi-structured interviews with students. Through these interviews, we seek to gain a more profound qualitative understanding of how to interpret the preliminary findings of this research.

Our current study illuminates the complex interplay between critical thinking (CT), moral considerations, and teaching methods within humanities programs in higher education. It suggests a mismatch between the intended learning outcomes and the expectations of students, suggesting a need to reassess the curriculum with a greater emphasis on the ethical aspects of critical thinking. Nonetheless, this proposed shift in focus brings up new inquiries that require further exploration prior to making such a significant decision.

## **AUTHOR BIOGRAPHY**

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#### **ETHICS**

Research was approved through Utrecht University's ethical review processes.

## **REFERENCES**

Arum, Richard, and Josipa Roksa. 2011. *Academically Adrift: Limited Learning on College Campuses*. Chicago: University of Chicago Press.

Bailin, Sharon, and Mark Battersby. 2016. *Reason in the Balance: An Inquiry Approach to Critical Thinking*. Indianapolis: Hackett Publishing.

Behari-Leak, Kasturi. 2020. "Toward a Borderless, Decolonized, Socially Just, and Inclusive Scholarship of Teaching and Learning." *Teaching & Learning Inquiry* 8 (1): 4–23. https://doi.org/10.20343/teachlearningu.8.1.2.

Biggs, John, and Catherine Tang. 2015. "Constructive Alignment: An Outcomes-Based Approach to Teaching Anatomy." In *Teaching Anatomy*, edited by Lap Ki Chan and Wojciech Pawlina: 31–38. Cham, CH: Springer International Publishing. <a href="https://doi.org/10.1007/978-3-319-08930-0">https://doi.org/10.1007/978-3-319-08930-0</a> 4.

Billings, Laura, and Terry Roberts. 2014. *Teaching Critical Thinking: Using Seminars for 21st Century Literacy*. New York City: Routledge.

- Bloom, Benjamin Samuel. 1956. *Taxonomy of Educational Objectives: The Classification of Educational Goals*, 1st ed. Harlow, UK: Longman Group.
- Clarke, John H., and Arthur W. Biddle. 1993. *Teaching Critical Thinking: Reports from Across the Curriculum*. Prentice Hall.
- Crenshaw, Phillip, Enoch Hale, and Sallie L. Harper. 2011. "Producing Intellectual Labor in the Classroom: The Utilization of a Critical Thinking Model to Help Students Take Command of Their Thinking." *Journal of College Teaching & Learning 8* (7): 13–26. https://doi.org/10.19030/tlc.v8i7.4848.
- Davies, Martin. 2015. "A Model of Critical Thinking in Higher Education." Higher Education: Handbook of Theory and Research, January. https://doi.org/10.1007/978-3-319-12835-1\_2.
- Dumitru, Daniela. 2019. "Creating Meaning. The Importance of Arts, Humanities and Culture for Critical Thinking Development." *Studies in Higher Education* 44 (5): 870–79. https://doi.org/10.1080/03075079.2019.1586345.
- Ennis, Robert H. 1985. "A Logical Basis for Measuring Critical Thinking Skills." *Educational Leadership*. <a href="https://www.semanticscholar.org/paper/A-Logical-Basis-for-Measuring-Critical-Thinking-Ennis/80a7c7d4a98987590751df4b1bd9adf747fd7aaa">https://www.semanticscholar.org/paper/A-Logical-Basis-for-Measuring-Critical-Thinking-Ennis/80a7c7d4a98987590751df4b1bd9adf747fd7aaa</a>.
- Facione, Peter. 1990. Critical Thinking: A Statement of Expert Consensus for Purposes of Educational Assessment and Instruction (The Delphi Report). Millbrae, CA: California Academic Press.
- Facione, Peter A., and Noreen C. Facione. 2013. "Critical Thinking for Life: Valuing, Measuring, and Training Critical Thinking in All Its Forms." *Inquiry: Critical Thinking Across the Disciplines* 28 (1): 5–25. <a href="https://doi.org/10.5840/inquiryct20132812">https://doi.org/10.5840/inquiryct20132812</a>.
- Facione, Peter, Noreen Facione, and Carol Giancarlo. 2000. "The Disposition Toward Critical Thinking: Its Character, Measurement, and Relationship to Critical Thinking Skill." *Informal Logic* 20 (1). https://doi.org/10.22329/il.v20i1.2254.
- Felten, Peter, and Johan Geertsema. 2023. "Recovering the Heart of SoTL: Inquiring into Teaching and Learning 'as If the World Mattered." *Innovative Higher Education* 48 (6): 1095–1112. <a href="https://doi.org/10.1007/s10755-023-09675-4">https://doi.org/10.1007/s10755-023-09675-4</a>.
- Fisher, Alec. 2011. Critical Thinking: An Introduction. Cambridge, UK: Cambridge University Press.
- Frykholm, Joel. 2021. "Critical Thinking and the Humanities: A Case Study of Conceptualizations and Teaching Practices at the Section for Cinema Studies at Stockholm University." *Arts and Humanities in Higher Education* 20 (3): 253–73. https://doi.org/10.1177/1474022220948798.
- Geng, Fuyun. 2014. "A Content Analysis of the Definition of Critical Thinking." *Asian Social Science* 10 (19): 124. https://doi.org/10.5539/ass.v10n19p124.
- Hitchcock, David. 2015. "The Effectiveness of Instruction in Critical Thinking." In *The Palgrave Handbook of Critical Thinking in Higher Education*, edited by Martin Davies and Ronald Barnett, 283–94. New York: Palgrave Macmillan. https://doi.org/10.1057/9781137378057\_18.
- Lewis, Arthur, and David Smith. 1993. "Defining Higher Order Thinking." Theory into Practice 32 (3): 131–37.
- Loes, Chad N., Mark H. Salisbury, and Ernest T. Pascarella. 2015. "Student Perceptions of Effective Instruction and the Development of Critical Thinking: A Replication and Extension." *Higher Education* 69 (5): 823–38. https://doi.org/10.1007/s10734-014-9807-0.
- Nussbaum, Martha C. 2016. Not for Profit. Princeton University Press.
- Paul, Herman. 2021. Kritisch Denken: Over het Ethos van de Geesteswetenschappen. Universiteit Leiden.
- Paul, Richard. 1991. "Critical Thinking: What Every Person Needs to Survive in a Changing World." *NASSP* Bulletin 75 (533): 120–22. <a href="https://doi.org/10.1177/019263659107553325">https://doi.org/10.1177/019263659107553325</a>.
- Popkewitz, Thomas S., and Lynn Fendler. 1999. *Critical Theories in Education: Changing Terrains of Knowledge and Politics*. New York: Routledge.
- Sanders, Maria, and Jason Moulenbelt. 2011. "Defining Critical Thinking: How Far Have We Come?" *Inquiry: Critical Thinking Across the Disciplines* 26 (1): 38–46. https://doi.org/10.5840/inquiryctnews20112616.
- Small, Helen. 2013. *The Value of the Humanities*. Oxford, UK: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199683864.001.0001.
- Sternberg, Robert J. 1986. *Critical Thinking: Its Nature, Measurement, and Improvement. Washington, DC: National Institute of Education*. https://eric.ed.gov/?id=ED272882.

New York Press.

Tapper, Joanna. 2004. "Student Perceptions of How Critical Thinking Is Embedded in a Degree Program." Higher Education Research and Development 23 (2): 199–222. <a href="https://doi.org/10.1080/0729436042000206663">https://doi.org/10.1080/0729436042000206663</a>.
ten Dam, Geert, and Monique Volman. 2004. "Critical Thinking as a Citizenship Competence: Teaching Strategies." Learning and Instruction 14 (4): 359–79. <a href="https://doi.org/10.1016/j.learninstruc.2004.01.005">https://doi.org/10.1016/j.learninstruc.2004.01.005</a>.
Utrecht University, "Bachelor's and Master's Programmes," Faculty of Humanities, accessed August 30, 2024. <a href="https://www.uu.nl/en/organisation/faculty-of-humanities/education#ba-ma-programmes">https://www.uu.nl/en/organisation/faculty-of-humanities/education#ba-ma-programmes</a>.
Yager, Robert E. 1996. Science/Technology/Society as Reform in Science Education. Albany, NY: State University of

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