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THEORETICAL AND PEDAGOGICAL-PSYCHOLOGICAL ASPECTS OF DEVELOPING STUDENTS' CRITICAL THINKING SKILLS

Abstract. *Innovative education is intended to develop students' critical thinking in both pedagogical and psychological terms, to guide learners towards creative ways of solving real-life problems, and to foster self-development and self-education. There is no single, guaranteed route to critical thinking; there is, however, a definable set of teaching conditions through which critical thinkers can be nurtured. This article examines the theoretical and pedagogical-psychological foundations of developing students' critical thinking in higher education. It clarifies the concept by distinguishing critical thinking from related but distinct mental processes such as memorisation and comprehension; it sets out the pedagogical conditions and learner commitments on which the development of critical thinking depends; and it analyses five defining features of critical thinking — its independence, its reliance on information as a starting point, its origin in problems, its pursuit of well-grounded argument, and its fundamentally social character. The article concludes that critical thinking is best understood not as a technique to be delivered but as a disposition cultivated through sustained pedagogical and psychological conditions, and that writing is among its most powerful instruments.*

Keywords: critical thinking; higher education; pedagogical-psychological development; comprehension; argument; curiosity; discussion; independent thinking; writing.

TALABALARDA TANQIDIY FIKRLASH KO'NIKMLARINI RIVOJLANTIRISHNING NAZARIY, PEDAGOGIK VA PSIXOLOGIK JIHATLARI

Annotatsiya. *Innovatsion ta'lim talabalarda tanqidiy fikrlashni pedagogik va psixologik nuqtai nazardan rivojlantirishga, ularni hayotiy muammolarni ijodiy hal etishga yo'naltirishga hamda o'z-o'zini rivojlantirish va o'z-o'zini ta'lim olish kompetensiyalarini shakllantirishga xizmat qiladi. Tanqidiy fikrlashni rivojlantirishning yagona va kafolatlangan usuli mavjud emas, biroq uni samarali shakllantirish imkonini beradigan pedagogik shart-sharoitlar majmui mavjud. Mazkur maqolada oliy ta'limda talabalarning tanqidiy fikrlashini rivojlantirishning nazariy, pedagogik va psixologik asoslari tahlil qilingan. Unda tanqidiy fikrlash tushunchasi xotira va tushunish kabi unga yaqin, ammo mazmunan farqlanuvchi bilish jarayonlaridan ajratib ko'rsatilgan; tanqidiy fikrlashning rivojlanishi uchun zarur bo'lgan pedagogik shart-sharoitlar hamda talabalarning mas'uliyati yoritilgan. Shuningdek, tanqidiy fikrlashning beshta asosiy xususiyati — mustaqilligi, axborotga tayanuvchi boshlang'ich asosga egaligi, muammolardan kelib chiqishi, dalillarga asoslangan argumentatsiyaga intilishi va ijtimoiy xususiyati tahlil qilingan. Maqolada tanqidiy fikrlash tayyor usul emas, balki uzluksiz pedagogik va psixologik sharoitlarda shakllanadigan tafakkur kompetensiyasi ekanligi hamda yozma faoliyat uni rivojlantirishning eng samarali vositalaridan biri ekani xulosa qilinadi.*

Kalit so'zlar: tanqidiy fikrlash; oliy ta'lim; pedagogik-psixologik rivojlanish; tushunish; argumentatsiya; qiziquvchanlik; munozara; mustaqil fikrlash; yozma faoliyat.

ТЕОРЕТИЧЕСКИЕ, ПЕДАГОГИЧЕСКИЕ И ПСИХОЛОГИЧЕСКИЕ АСПЕКТЫ РАЗВИТИЯ НАВЫКОВ КРИТИЧЕСКОГО МЫШЛЕНИЯ СТУДЕНТОВ

Аннотация. Инновационное образование направлено на развитие критического мышления студентов в педагогическом и психологическом аспектах, формирование у них способности творчески решать реальные жизненные проблемы, а также развитие навыков саморазвития и самообразования. Единого гарантированного пути формирования критического мышления не существует, однако имеются определённые педагогические условия, способствующие его эффективному развитию. В статье рассматриваются теоретические, педагогические и психологические основы развития критического мышления студентов в системе высшего образования. Раскрывается сущность критического мышления посредством его разграничения с такими когнитивными процессами, как запоминание и понимание; определяются педагогические условия и учебная деятельность студентов, необходимые для формирования критического мышления. Кроме того, анализируются пять ключевых характеристик критического мышления: самостоятельность, опора на информацию как исходную основу, проблемная направленность, стремление к аргументированным выводам и социальная природа. В заключение подчёркивается, что критическое мышление следует рассматривать не как отдельную технологию обучения, а как интеллектуальную компетентность, формирующуюся в условиях целенаправленного педагогического и психологического воздействия, при этом письменная деятельность является одним из наиболее эффективных средств её развития.

Ключевые слова: критическое мышление; высшее образование; педагогико-психологическое развитие; понимание; аргументация; любознательность; дискуссия; самостоятельное мышление; письменная деятельность.

Introduction

Critical thinking is widely regarded as one of the competencies most necessary for meeting the demands of the twenty-first century. It enables learners to understand more deeply what they study and do, and to act with judgement in conditions of uncertainty and information abundance. The literature offers many definitions of the concept, and it is helpful to begin by marking off what critical thinking is not, since several valuable mental processes are frequently mistaken for it.

Remembering is the most fundamental of these processes: without it, learning could not proceed at all. Yet remembering differs fundamentally from critical thinking. A computer's memory far exceeds our own, but no one would call it a critical thinker. Much teaching, and much examination, nonetheless prizes the development of memory above any form of thinking, testing chiefly the scope of what students can recall. Advocates of critical thinking have in mind more complex forms of mental activity.

Comprehension is a second process indispensable to learning but distinct from critical thinking. Understanding a complex idea — a difficult theorem, a demanding passage of history or literature — involves genuinely complex mental work, but it is not yet critical thinking. While we labour to understand the ideas of others, our own thinking remains, at first, receptive rather than generative: we take in what others have created before us. Critical thinking begins at the next step, when ideas that have been understood are examined, evaluated, developed and applied. The recall of evidence and the comprehension of ideas are thus preconditions of critical thinking, but they do not, in themselves, constitute it.

Positively stated, critical thinking is a complex process of creatively integrating ideas and possibilities, and of rethinking and reconstructing concepts and information. It operates simultaneously at several levels of active and interactive cognition. The purpose of this article is to examine the theoretical and pedagogical-psychological foundations of this process and the conditions under which it can be developed in university students.

Methods

The article is theoretical in character. It draws on the pedagogical and psychological literature on critical thinking — including the foundational accounts of Dewey (1933), Meyers (1986) and Klooster (2001), and the analytic tradition represented by Ennis (1989), Facione (1990), Halpern (1998) and Paul and Elder (2006) — and analyses the concept, its constituent features and the teaching conditions associated with its development. Rather than reporting an

154 empirical study, it synthesises these sources into a coherent account of what critical thinking is, how it differs from adjacent processes, and what pedagogical and psychological conditions foster it.

Critical thinkers are less easily deceived and less vulnerable to manipulation, because they possess their own system of views against which claims can be tested. In critical thinking, ideas and their significance are considered from several perspectives at once and weighed against alternatives. Its highest expression is a form of mental activity in which analysis, comparison, interpretation, application, argument, innovation, problem-solving and the evaluation of one's own thinking are all brought to bear. Critical thinking also develops communication and teamwork; it enlivens the educational process and can turn study into a source of satisfaction for teacher and student alike.

Developing critical thinking is not a simple task, nor one that can be completed at a particular age and thereafter set aside. There are no clear, fixed paths to it. There is, however, a definable set of teaching conditions through which critical thinkers can be nurtured. The following conditions are necessary on the part of the teacher:

1. provide time and opportunity for critical thinking;
2. give students genuine occasions to think;
3. accept a diversity of ideas and opinions;
4. allow students to participate actively in the learning process;
5. create a climate in which no one is ridiculed for their contributions;
6. assure each student that they are capable of critical thinking;
7. value the emergence of critical thinking when it appears.

At the same time, the following commitments are required on the part of students:

1. developing self-confidence and an understanding of the value of their own ideas and opinions;
2. participating actively in the learning process;
3. listening to differing views with respect;
4. being prepared either to form their own judgement or, where warranted, to suspend it.

Results

Analysis of the literature and of the conditions above yields five defining features of critical thinking, which together clarify its psychological structure.

First, critical thinking is independent thinking. When a lesson is organised on the principles of critical thinking, each participant forms their own ideas, assessments and beliefs. No one can think critically on another's behalf; we can think in this way only for ourselves. Students therefore need the freedom to use their own minds and to find their own answers, even to the most complex questions. Each learner decides for themselves how to think, and this autonomy is among the most important aspects of critical thinking.

Second, information is the starting point of critical thinking, not its result. Knowledge motivates and enables thought: it is difficult, as the saying goes, to think with an empty head. To generate a complex idea, one must first process a great deal of raw material — facts, ideas, texts, theories, concepts. Critical thinking is possible at any age, since even young learners bring experience and knowledge to bear; and it is through critical thinking that ordinary cognition acquires individuality, clarity, coherence and productivity.

Third, critical thinking begins with a question or problem. Human beings are curious by nature; noticing something new, we naturally seek to understand its essence. Dewey (1933) argued that genuine thinking arises only when a learner engages with a specific problem: it is only in struggling with a real difficulty, and seeking a way out of it, that the student truly thinks. The pedagogical implication is that teachers should anticipate the problems students may encounter and prepare them to formulate such problems independently. Approached in this way, even reading is transformed from a mechanical school exercise into purposeful intellectual work, in which students seek and find answers by gathering evidence, analysing texts and comparing competing points of view.

Fourth, critical thinking strives for well-grounded argument. A critical thinker arrives at their own solution to a problem and supports it with reasoned, well-founded evidence, while

acknowledging that other solutions are possible and arguing that their own is the more defensible. A persuasive argument has three parts: a claim (the thesis or central idea); the reasons that support it; and the evidence — statistics, textual passages, personal experience — that supports those reasons in turn. Underlying all of these is a shared basis of warrant common to speaker and audience. Crucially, an argument persuades only when it takes opposing arguments into account; the acknowledgement of other viewpoints strengthens rather than weakens it.

Fifth, critical thinking is social. A thought is sharpened only when it is shared. As Arendt observed, the presence of others helps to make our thinking whole. When we debate, read, discuss, object and exchange ideas, we clarify and deepen our own positions. This is why educators oriented towards critical thinking make extensive use of pair and group work, debate and discussion, and varied forms in which students present their work. Such teachers cultivate the qualities that effective exchange requires — restraint, the capacity to listen, and responsibility for one's own opinion — and in doing so bring the educational process closer to life beyond the classroom.

Conclusion

Critical thinking is a complex, creative and social process that must be distinguished carefully from the memorisation and comprehension with which it is often confused. It is independent, it begins from information and from problems, it pursues well-grounded argument, and it is realised most fully in exchange with others. It cannot be delivered as a fixed technique; it is cultivated, over time, through a definable set of pedagogical and psychological conditions — conditions that give students the time, freedom, safety and encouragement to think for themselves, and that require of students, in turn, confidence, active participation, respect for other views and responsibility for their own.

Critical thinking is manifested most clearly in writing, where the process of thought becomes visible and available to the teacher. The student who writes is always active: thinking independently, drawing on all available knowledge, and assembling reliable arguments to support a position. Writing is also inherently social, since the writer composes with a reader in mind, and it offers students what they value most — the teacher's genuine interest in their work and the opportunity to share their thinking with others. For these reasons, writing may be regarded as one of the most important instruments for developing critical thinking. The pedagogical-psychological task, then, is not to teach critical thinking as a lesson to be learned once, but to sustain the conditions under which the disposition to think critically can take root and grow.

References

1. Arendt, H. (1978). *The life of the mind*. Harcourt Brace Jovanovich.
2. Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. D. C. Heath.
3. Ennis, R. H. (1989). Critical thinking and subject specificity: Clarification and needed research. *Educational Researcher*, 18(3), 4–10. <https://doi.org/10.3102/0013189X018003004>
4. Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction (The Delphi Report)*. California Academic Press.
5. Halpern, D. F. (1998). Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist*, 53(4), 449–455. <https://doi.org/10.1037/0003-066X.53.4.449>
6. Klooster, D. (2001). What is critical thinking? *Thinking Classroom*, 4, 36–40.
7. Meyers, C. (1986). *Teaching students to think critically: A guide for faculty in all disciplines*. Jossey-Bass.
8. Paul, R., & Elder, L. (2006). Critical thinking: The nature of critical and creative thought. *Journal of Developmental Education*, 30(2), 34–35.