

Letter to Editor

Critical Thinking Vitality in a Social Accountable Curriculum



Masoumeh Sadat Abtahi¹ , Masoud Khandehroo² , Mahdi Aghabagheri^{3*}

1. Department of Curriculum Planning, Faculty of Islamic Education, Science and Research Branch, Islamic Azad University, Tehran, Iran.

2. Department of Management Sciences and Health Economics, School of Health, Mashhad University of Medical Sciences, Mashhad, Iran.

3. Department of Artificial Intelligence, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.



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Dear Editor

There are different categorizations for soft skills, and one of them is the classification by the [World Economic Forum \(WEF\)](#), which includes complex problem-solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision-making, service orientation, negotiation, and cognitive flexibility [1].

Soft skills, including critical thinking, are essential components of an innovative undergraduate medical education curriculum. Themes such as humanities in medical education, medical humanities, and sociology of medicine are in this context in this context [2]. There is a meaningful and mutual relationship between the humanities and efficacy, efficiency, and effectiveness¹. For example, self-efficacy is one of the psychological factors that is closely related to critical thinking; a per-

1. Perplexity AI, using data from the Encyclopedia of Humanities, summarized these three terms as follows: "Efficacy is about achieving the desired result, efficiency is about using minimal resources to get the job done, and effectiveness is about producing the intended outcome in real-world situations. Efficacy and efficiency together lead to effectiveness."

* Corresponding Author:

Mahdi Aghabagheri

Address: Department of Artificial Intelligence, School of Medicine, Shahid Sadoughi University of Medical Sciences, Yazd, Iran.

E-mail: Mahdi.Aghabagheri@gmail.com

son who is a highly critical thinker also tends to possess high self-efficacy [3]. Other self-characteristics, such as self-regulation, self-directedness, self-management, and self-monitoring, can also be considered in this regard.

If one of the impacts of an undergraduate medical education program is considered to be social accountability, it can be derived from soft skills as potential resources. Boelen et al. define the scope of social accountability in the context of a university or a medical school [4]. While this concept is commendable, it is more frequently realized in developed countries due to the integration of universities and society. One of the main objectives of any university, including a medical school, is to address social problems. Nonetheless, in developing countries, numerous research projects have been designed and implemented at universities, some of which are of high quality. The issue that arises is the efficiency and effectiveness of these research projects. To what extent, these research projects are problem-based, and can their results and conclusions effectively address social issues?

Soft skills in general, and critical thinking in particular, are not mere abstract concepts. They are essential skills for anyone seeking to achieve success. A medicine graduate, as mentioned and emphasized in the competencies



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document², must be proficient in certain competencies, and soft skills are indispensable in this context. Without mastery of soft skills, a physician cannot be considered efficient and effective.

As healthcare professionals enhance their soft skills and critical thinking abilities, they become better equipped to respond to both local and global health priorities. This progression not only leads to improved health outcomes but also strengthens public confidence in the medical profession. Ultimately, these skills contribute to a more effective public health system, ensuring that healthcare services are equitable, accessible, and tailored to the needs of all communities [5].

One notable example in this regard is Borzuya, the physician. An examination of his academic life reveals that he was not only a physician but also a philosopher and linguist [6]. Humanities are a taken-for-granted prerequisite for all, including physicians who wish to stand out.

References

- [1] World Economic Forum (WEF). The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution. Cologny: World Economic Forum; 2016. [\[Link\]](#)
- [2] Alperin S, Clemens N, Merritt C, Statile AM, Mallon D. Implementation of humanities in medicine curriculum for pediatric residents. *Academic Pediatrics*. 2020; 20(7):e21-2. [\[DOI:10.1016/j.acap.2020.06.064\]](#)
- [3] Solikah E, Utami B, Sukarmin S, Nugraheni FS. The relationship between students' self efficacy and critical thinking skill in motions and forces materials. Paper presented at: AIP Conference Proceedings. 2023 January 27; Woodbury, United States. [\[DOI:10.1063/5.0105930\]](#)
- [4] Boelen C, Pearson D, Kaufman A, Rourke J, Woollard R, Marsh DC, Gibbs T. Producing a socially accountable medical school: AMEE Guide No. 109. *Medical Teacher*. 2016; 38(11):1078-91. [\[DOI:10.1080/0142159X.2016.1219029\]](#) [\[PMID\]](#)
- [5] CDC Competencies for Public Health Professionals [Internet]. 2024 [Updated 2024 May 16]. Available from: [\[Link\]](#)
- [6] Aghabagheri M, Mehrmohammadi M, Bagherinoparast K. [Borzuya, the physician: A curriculum output of Khosravi education (Persian)]. *The Journal of Medical Education and Development*. 2023; 18(1):392-400. [\[DOI:10.18502/jmed.v18i1.12748\]](#)

2. The Competencies Document for Medicine Graduates is one of the national documents from the Ministry of Health and Medical Education (Undergraduate Medical Education Council) aimed at ensuring the quality of graduates.