

Pedagogical Strategies for the Development of Critical Thinking, Communication Competences and Empathy in Managing the Professional Doctors' Education

Martin Krč¹, Zuzana Strenáčiková²

DOI: <https://doi.org/10.53349/re-source.2026.is1.a1537>

Abstract

The cultivation of critical thinking, communication skills, and empathy are fundamental pillars of contemporary educational management. Consequently, it is essential to evaluate pedagogical strategies that facilitate the development of these core competencies within medical education. This paper examines active and experiential learning methodologies, reflective practice, professional collaboration, and the integration of innovative technologies. Furthermore, emphasis is placed upon the significance of assessment, self-reflection, and the ethical-psychological dimensions of a clinician's professional evolution. The objective of this study is to underscore the necessity of an integrated educational model that synthesises clinical erudition with humanity, empathy, and professional responsibility toward patients.

Keywords: Critical Thinking, Communication Skills, Empathy, Management, Doctors' Education

1 Development of Cognitive and Affective Competencies in Medical Education

Medical education can be considered a professional and systematic process of training both future doctors in a university setting and other healthcare professionals within further and

¹ Vysoká škola DTI, Sládkovičova 533/20, 018 41 Dubnica nad Váhom.

E-Mail: 81mks81@gmail.com

² Vysoká škola DTI, Sládkovičova 533/20, 018 41 Dubnica nad Váhom.

E-Mail: zuzana.strenacikova@gmail.com

higher education environments. This educational framework encompasses the acquisition of the knowledge, skills, attitudes, and values essential for professional practice.

European directives place significant emphasis upon the Continuous Professional Development of healthcare practitioners, and Slovakia aligns with these international standards. Their goal is to renew knowledge, skills and abilities in order to maintain the safe and effective performance in the medical doctor and other health professionals, and at the same time, to strive to keep up with current development and trends.

The development of cognitive and affective competencies is one of the basic aims of modern medical education. The cognitive area includes abilities such as analytical thinking, problem solving, critical, but also clinical decision-making and the application of theoretical knowledge in practice. Their development is supported by methods such as problem-based learning, case study analysis or simulations of clinical situations, which lead students, doctors and medical staff in general in the process of regular professional development to independence and critical thinking.

Affective competencies, such as empathy, communication skills, self-reflection and ethical decision-making, represent the emotional and value-based aspect of the medical profession. Their development requires pedagogical approaches that combine knowledge with personal growth. The integration of cognitive and affective skills allows educating doctors who combine professional erudition with humanity and the ability to understand the patient holistically.

Gurňáková et Marcinechová (2021, p. 8) state that: *“The needs of practice lead, especially abroad, to the formulation of protocols and to the creation of specific training programs in communication, which are based on principles proven in other areas of medicine”* (Gurňáková, Marcinechová, 2021, p. 8).

1.1 Critical Thinking as a Basis for Decision-making

As stated by Grecmanová et al. (2000, p. 13): *“Critical thinking is primarily active and independent reasoning, conditioned by the following abilities: understanding information and its thorough examination, comparison of ideas with other opinions and claims, seeing facts in context, using all levels of thinking processes, taking a position and taking responsibility for it”* (Grecmanová et al., 2000, p. 13).

Critical thinking forms the basis for decision-making and thus enables objective analysis of information, evidence evaluation and selection of the most appropriate solutions based on rational arguments, as opposed to assumptions or emotions. Every person who applies critical thinking in his/her life is able to distinguish between facts and opinions, verify sources of information, foresee the consequences of his/her decisions and take into account different perspectives on the problem.

In the context of medicine, critical thinking plays a key role, because doctors' decisions directly affect the health and life of a patient. Critical thinking often allows doctors to connect scientific knowledge with clinical experience and evaluate diagnostic data. This brings a practical ability

to weigh the risks and benefits of treatment and make ethically responsible decisions. In a broader sense, critical thinking represents a tool for professional reflection and for a guarantee of high-quality decision-making process management in all fields, where complex information and consequences for people are worked with. The development of critical thinking also has its irreplaceable place in medical education, at all educational levels.

Bodoríková et al. (2023, 153 – 154) state that: *“Topics regarding students' critical thinking still raise many questions among teachers, gradually leading them to a changed view of teaching, enabling them to see the teaching process in broader contexts, to realize the essence of educational situations and to find ways to solve them”* (Bodoríková et al., 2023, 153 – 154).

1.2 Communication Competences as Part of Professional Identity

Communication competencies represent a comprehensive complex of knowledge, skills and attitudes that enable a person to communicate effectively, clearly and in a cultured manner. Consequently, these competencies encompass the ability to convey information accurately, engage in active listening, demonstrate interpersonal understanding, and adapt communicative strategies to specific contexts and objectives.

Communication competencies encompass both verbal and non-verbal expression, the capacity for active listening, the demonstration of empathy, and the ability to interact assertively and ethically, whilst maintaining respect for the individual needs of the patient. The cultivation of these skills necessitates systematic education throughout a clinician's professional tenure; furthermore, such training should constitute an intrinsic component of both undergraduate medical curricula and subsequent Continuous Professional Development. The author Rustici (2019) states that while in ordinary interactions the information exchange takes place almost seamlessly and smoothly, in a situation where strong emotions are activated, where a lot is at stake, or where conflict endangers the quality of the mutual relationship, it is very important to pay special attention to the way of communication and its interpretation by the people with whom a person communicates (Rustici, 2019).

Veselá (2021) complements Rustici when she mentions that in both, team communication and communication with the patient, the following rule applies: what is meant, may not be said, what is said, may not be heard, what is heard, may not be understood, what is understood, may not be done, and what is done, may not be done correctly (Veselá, 2021).

1.3 Empathy as a Key Value of the Medical Profession

Empathy is the ability to empathize with other people's experience, to understand their feelings, thoughts, and situation – and to respond to them with respect, understanding, and compassion. It does not just mean “feeling the same,” but to perceive the other person from their perspective, while maintaining distance and acting with respect for their needs.

According to Goleman (2017), the meaning of empathy is to understand the interests and emotions of other people. It is mainly the ability to see the situation from their point of view. It is respect for differences in the feelings and opinions of other people (Goleman, 2017). Doctor's empathy is a specific form of empathy that refers to the ability of a healthcare professional to perceive, understand, and respond adequately to the emotional and psychological state of the patient, while maintaining professional distance and objectivity. As Baštecká et al. (2009) state, empathy is the ability to sensitively perceive and understand the patient's inner world, including his/her subjective feelings and meanings. It is accompanied by emotional involvement and sincere interest in the other person, while in communication, the healthcare professional continuously and tactfully demonstrates his/her understanding (Baštecká et al., 2009, p.326).

2 Pedagogical Strategies and Recommendations for Effective Learning

In contemporary medical education, emphasis is increasingly placed not only upon the acquisition of clinical knowledge but, crucially, on the development of the personal and social competencies of both undergraduate medical students and postgraduate practitioners. Modern clinical practice urgently necessitates experts who possess the capacity for critical reflection, effective communication, and an empathetic response to the multifaceted needs of the patient.

Duchovičová et al. (2018) state that the development of evaluative thinking is achieved by gradual and systematic practice and development of partial evaluative skills. These skills include distinguishing between fact and opinion, identifying key and relevant information in the curriculum, formulating conclusions and generalizations, asking meaningful questions, structuring content according to the goals and different taxonomic levels, as well as recognizing relationships between cause and effect (Duchovičová, et al., 2018).

2.1 Active and Experiential Learning

Active and experiential learning within medical education represents a pedagogical approach wherein knowledge acquisition occurs through direct participation, practical experience, and critical reflection, rather than through the passive reception of information via traditional lectures. The objective is to support cognitive, practical and affective competencies, thereby equipping future doctors with the necessary skills to navigate complex, real-world clinical scenarios.

In the contemporary era, it is essential to prioritise medical education in the field of communication competencies as a fundamental component of strategic quality management

within healthcare. This should be delivered through the framework of Continuous Professional Development (CPD) to ensure the sustained enhancement of clinical standards. The opportunities in modern medical education are innovative approaches, active and experiential learning, which mainly consist of solving real or model problems from clinical practice. It is appropriate to include activating methods of education, such as brainstorming, problem-based learning, role-playing and the like into the framework of education and professional training.

Frk (2005) states that the final goal of the educational program should be to transfer the content of the curriculum to working performance. It is therefore necessary to ensure the consistency between the content of the curriculum and the content of the real work situations and the presence of practical situations in education. It is also necessary to verify whether the general principles have been correctly understood and to ensure a supportive environment for education (Frk, 2005, pp.96–99).

2.2 Reflection on Core Competencies and Feedback

Reflection upon core competencies, combined with structured feedback, enables clinicians to consciously evaluate their knowledge, skills, and attitudes, thereby identifying specific areas for development. This process facilitates the advancement of clinical, communicative, and empathetic proficiencies, enhances clinical decision-making, and underpins a commitment to lifelong professional growth.

As Blaško (2013) states, there is no universally valid definition of competence. Various experts from the fields of pedagogy, sociology, philosophy, psychology and economics have tried to define this concept. They agreed that key competences must be necessary and beneficial for the individual and the entire society.

If a person is to be competent in a certain area of life, it is necessary for him/her to achieve a certain level of education. (S)he must both, master these abilities and skills and at the same time, be able to effectively apply them in practice. Therefore, as Belz et al. (2011) state, competencies for a given activity can be understood as an individual's ability to handle a certain situation, an assigned task or a profession (Belz et al., 2011).

2.3 Support for Lifelong Learning and Management of Professional Identity

An integral part of a doctor's profession are communication and interpersonal skills that allow building trust, effectively informing the patient, and at the same time, managing challenging ethical or conflict situations. Teamwork, interdisciplinary cooperation, and respect for the diverse values and needs of patients are also essential.

Professional identity management is a process by which individuals consciously form, develop, and maintain their professional identity – that is, a set of values, attitudes, knowledge, skills,

and behaviours that characterize their professional role and the way they present themselves in their professional community. In the medical environment, communication is the basis for quality management of doctors' attitudes toward patients.

According to Kristová (2002), communication is a universal phenomenon of human society and a direct regulator of the level of interpersonal relationships. At the same time, it can be considered a basic condition for the existence of every social system. No social group can exist without communication; it contributes to ensuring social contacts and interpersonal relationships and is also a means of social integration of an individual into a group (Kristová, 2002).

Communication has an irreplaceable function in the doctors' work and in the healthcare profession in general. Overall, medical professions require a complex set of professional and personal qualities and constant readiness for further personal and professional development.

2.4 Recommendations for both Pedagogical and Medical Practice

Pedagogical strategies for the development of critical thinking, communication competencies and empathy in medical education should mainly connect theory with practice. It is also very important to support active, reflective and experiential learning. Methods that create simulations of clinical situations, problem-oriented learning, discussions and reflective diaries that develop the ability of students and trainees of educational programs to analyse, argue and make decisions are considered very effective methods. An important part of doctors' education is systematic and objective feedback with an emphasis mainly on the development of communication skills through training and simulated interviews. Training in empathy through reflection on patient experiences and ethical discussions is also necessary. In medical practice, these principles are applied through several kinds of educational activities, mainly mentoring, supervision, interprofessional cooperation and lifelong learning.

Reflective practice and constructive feedback help doctors improve their professional and personal competencies and lead to ethical and empathetic care focused on the satisfaction of both, patients and healthcare professionals.

3 Conclusion

In Slovakia, the development of critical thinking is embedded within the National Educational Programme as a core component of cognitive competencies. This priority is integrated across many educational domains and subjects. In alignment with the strategic objectives and tasks that foster critical thinking, diverse pedagogical methodologies, formats, and instructional tools are deployed. These are specifically designed to encourage the active engagement of students and to cultivate their capacity for independent reasoning.

Critical thinking is defined as the capacity to independently analyse, evaluate, and creatively synthesise information to facilitate rational and ethically grounded decision-making. Within

an educational context, it fosters a profound understanding of the subject matter, promotes autonomy, and enhances problem-solving capabilities. In a pedagogical sense, it serves as a vital instrument for reflection and the iterative refinement of the instructional process. Its development is primarily facilitated through discourse, problem-based learning, collaborative projects, and the analysis of case studies. Ultimately, the cultivation of critical thinking engenders personal autonomy, professional responsibility, and a commitment to lifelong learning.

Critical thinking and communication are interconnected, because clear and logical expression requires the ability to think, analyse and argue. Through communication, critical thinking is expressed also externally – it allows a person to effectively defend opinions, to respond to arguments and to be involved into a meaningful dialogue.

Communication between a doctor and a patient plays a key role in providing quality health care. It is the basis for building trust and an effective therapeutic relationship, which affects the patient's willingness to cooperate, share important information and adhere to recommended treatment. Clear, empathetic and professional communication contributes to more accurate diagnosis, reduces patient stress and anxiety and increases his/her satisfaction with health care. At the same time, it acts as a preventive means against misunderstandings, conflicts and complaints. Therefore, in the context of modern healthcare, communication is not considered a supplement, but an integral part of clinical practice and doctor's professional competencies.

References

- BAŠTECKÁ, B., et al. (2009). *Psychologická encyklopedie: aplikovaná psychologie*. Portál, Praha. 520 s. ISBN 97-8807-3674-70-0.
- BELZ, H., & SIEGRIST, M. (2011). *Klíčové kompetence a jejich rozvíjení: východiska, metody, cvičení a hry*. Portál, Praha. s. 28, 375 pp. ISBN 978-80-736-7930-9.
- BLAŠKO, M. (2013). *Kvalita v systéme modernej výučby*. Technická univerzita, Košice, s. 113. ISBN 978-80-553-1281-1.
- BODORÍKOVÁ, N., PETROVÁ, G., & TIRPÁKOVÁ, A. (2023). *Kritické myslenie pohľadom učiteľov*. 1. vyd. Wolters Kluwer ČR, a. s., Praha, pp. 153–154. ISBN 978-80-7676-660-0.
- DUCHOVIČOVÁ, J., et al. (2018). *Stratégie rozvíjania kritického myslenia v pregraduálnej príprave učiteľov*. In *Studia scientifica facultatis Paedagogicae*. ISSN 1336-2232, 17(1), s. 73–84.
- FRK, V. (2008). *Systém a organizácia profesijného vzdelávania zamestnancov*. 2.vyd. FF PU, Prešov. ISBN 80-8068-367-2.
- GRECMANOVÁ, H., URBANOVSKÁ, E., & NOVOTNÝ, P. (2000). *Podporujeme aktivní myšlení a samostatné učení žáků*. HANEX, Olomouc. 159 s. ISBN 80-85783-28-2.
- GOLEMAN, D. (2017). *Emocionálna inteligencia*. Citadella, Bratislava. 432 s. ISBN 97-8808-1820-86-1.
- GURŇÁKOVÁ, J., & MARCINECHOVÁ, D. (2021). *Význam komunikácie s pacientom a jeho blízkymi v zásahoch záchrannej zdravotnej služby*. Ústav experimentálnej psychológie, Centrum

spoločenských a psychologických vied SAV Bratislava. Equilibria, s.r.o. Bratislava, 179 s. ISBN 978-80-89524-65-5.

KRISTOVÁ, J. (2002). *Komunikácia v ošetrovatelstve*. Osveta, Martin. 163 s. ISBN 80-8063-107-7.

RUSTICI, M. (2019). Communication Styles. In Moreira, M. E. – French, A. (Eds.). *Communication in Emergency Medicine*. pp. 3–15. Oxford University Press.

VESELÁ, K. (2021). Komunikácia v tíme. In Dobiáš, V. et al. *Urgentná medicína: prednemocničná, nemocničná, pre dospelých a deti*. pp. 1048–1052, Osveta, Martin.