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ABSTRACT

What is the relationship between the physician's identity and the practice of exercising one's individual and team work skills? Pedagogical reflection necessarily calls for a perspective of interdisciplinary and transdisciplinary collaboration, between knowledge and action, between scientific knowledge and the desire to care for others, in healthcare settings within a multi-professional framework.

This paper aims to identify the educational potential, as well as best practices and theoretical concepts that are useful in contributing to the pedagogical development of medical training.

Che relazione vige fra l'identità della figura del medico e la pratica dell'esercizio delle proprie capacità lavorative individuali ed in team? La riflessione pedagogica richiama necessariamente una prospettiva di collaborazione interdisciplinare e transdisciplinare, tra sapere e agire, tra conoscenza scientifica e volontà di prendersi cura dell'altro, nei contesti sanitari in un'ottica multiprofessionale.

Il presente lavoro vuole individuare le potenzialità educative, oltre che le buone prassi operative ed i concetti teorici che risultano essere utili nel contribuire ad un'elaborazione pedagogica della formazione medica.

KEYWORDS

Pedagogy, Medical Education, Care.

Pedagogia, Formazione medica, Cura.

1. Introduction

The science of pedagogy seeks to design, implement, and evaluate educational pathways concerning the human person, specifically the person-as-physician. Simultaneously, it invites reflection on the figure of the physician as both an educational and professional identity, and on the necessary formation required not only during the initial stages of academic education but also throughout one's career, in order to carry out a wise and competent exercise of one's abilities in daily professional practice.

"We are born human, but we must learn to become so. [...] Why must we be human? In the face of hatred and persecution, it is necessary to bear witness, to teach beauty and fragility, the spiritual and material value of human action, within the interplay of natural systems and technological devices" (Polenghi, 2020, p. VII).

To question the educational value and existential resilience of medical professionals is a necessary endeavour, as such values bear witness to human civilisation itself, in the awareness that professional practice is, by its very nature, ethically oriented. The relationship between pedagogy and medicine implies a path aimed at both the collective and the individual, and as such, demands a multidisciplinary and multi-professional perspective of collaboration—between knowledge and action, scientific understanding, collaborative strategies, and the will to care for others (Musaio, 2020). This work, within the framework of humanisation, aims to identify the educational potential, effective practices, and theoretical concepts that may contribute to a pedagogical elaboration of medical education.

2. The Physician: A Person in Continuous Formation

The report of the Global Commission on the Education of Health Professionals for the 21st Century, published in *The Lancet* (Frenk et al., 2010), calls for a new era in professional education. Through this publication,

the foundation is laid for a profound transformation in how future health professionals are trained. Specifically, it outlines the challenging state in which health professions currently find themselves, and proposes solutions relating to educational practices and the necessity of engaging students in the entirety of the training process. The relationship between medicine and pedagogy necessitates a deeper ethical exploration of the concept of the person, given that both educational practices and clinical operations must place the individual—each with their unique characteristics—at the heart of this binomial. The well-being of the person, including their formation, is the ontological goal of both pedagogy and medicine, regardless of the different disciplinary orientations that characterise educational sciences and medical knowledge. Every individual possesses both potential and limits—two dimensions which encapsulate the uniqueness and unrepeatable nature of each human being across different life and professional contexts. The person, therefore, is the bearer of distinct traits, among which the body—our embodied existence—stands out. Consider, for instance, the notion of corporeality, which unmistakably signifies the presence of each human being in the world. The person is a free being, a reflective subject aware of their limitations yet rich in potential; a sentient and acting subject, conscious of their vulnerabilities and fragility; a being open to the future while grounded in a past that becomes both personal and historical memory. As such, the person cannot be reduced to a single dimension of existence. Indeed, being a person is a category that permeates all caring professions—from those in education to those in healthcare (Rugarli, 2017). To design and implement educational pathways in medicine is to act for the good of the patient-person, in accordance with the moral ethics that are intrinsic to the profession. In this regard, it becomes essential to revisit the concept of *formation* (or *educational development*) and its connection to pedagogy and its various contexts of application, including the medical and healthcare domains. Formation should be understood as the integral development of one's capacities, skills, and competences, which inevitably have a profound impact on the human person in their complex, dynamic identity. For this reason, the design of educational pathways must be conceived, structured, and delivered according to a specific pedagogical rationale—one that identifies the existing elements, the components of the formative process, its aims, content, methods, and, above all, the subjects involved. In the specific context of medical education, it is essential to consider both the most up-to-date knowledge and technical skills, along with transversal

competences and personal abilities in service of a lifelong and life-wide learning approach for healthcare professionals. Training thus becomes an essential component of any complex professional activity, representing a genuine strategy for individual and social empowerment—capable of fostering reflection on practices and the challenges embedded in the professional environment.

"The cultural value of work reveals it as a significant educational experience, as it allows the individual to become aware of their capabilities, to adopt a positive stance towards reality, to self-design their existential path in life, and to develop their potential in a historically grounded manner—thus expressing their personality through this dynamic process" (Nicoli, 2009, p. 223).

Training is therefore a form of personal empowerment—a means of addressing the difficulties and critical aspects of professional practice, an opportunity for lifelong learning and reflection on a constantly evolving professional role. From a pedagogical perspective, being *in formation* throughout one's life, and thus across the various stages of professional development, means attributing educational value to work itself, learning not only the *know-how*, but also cultivating awareness of how one learns. In the healthcare field, training must adopt a personalised, yet inclusive and sustainable approach—attentive both to cutting-edge technological tools and to the ethical-educational dimensions of care (Orefice, 2020) and the valorisation of the *humanum*. In this sense, it is necessary to promote an active, co-constructed, and motivating form of learning that respects the lived experience of the individual, who must be seen as the protagonist of their professional development journey.

"If, in medicine, we move from the epistemological and procedural premise of explaining the disease phenomenon to one that also considers the meaning of the illness experience, what re-emerges is the central and problematic issue of the formation of the physician—both at university and in-service—which cannot be reduced solely to the acquisition of knowledge and technical competencies" (Castiglioni, 2015, p. 97).

Within healthcare, the objective of training is not only to provide the best possible preparation for physicians, but also to ensure a high quality of

therapeutic engagement with the patient, without neglecting the ongoing enhancement of the hospital environment as a whole. The formative path required to become a competent healthcare professional does not end with the conclusion of academic specialisation, but extends throughout the entirety of one's career. This creates an ongoing link between innovation and experience, knowledge and skills, scientific preparation and clinical-therapeutic ability—encompassing knowing, knowing how to act, and knowing how to be.

3. The Medical Competencies Required to Educate the Person

"Learning to learn, which cannot be reduced merely to the accumulation of information, should be interpreted through a reflective lens, activating that critical function which enables expert use of knowledge by reconfiguring practices within specific operational contexts" (Balduzzi, 2025).

The conscious, purposeful, wise, and precise use of one's cognitive resources in response to specific situations outlines the framework of *learning through competences*, a model which must also be explicitly fostered and strengthened within medical education. In this way, an educational and self-educational process is proposed—one characterised by stimuli and questions that facilitate learning, alongside communication skills and emotional reflection. This allows learners to develop insights into their strengths and weaknesses when approaching and identifying innovative solutions. The teaching of medical-scientific knowledge has always required close integration with skills and attitudes—elements which have progressively shaped the concept of the *clinician* as a professional role embodying scientific, practical, and situational knowledge. Today's context demands a comprehensive reform of academic training pathways, wherein competencies are viewed also from a pedagogical perspective, as essential for the holistic and up-to-date formation of future professionals. Consequently, it becomes necessary to undertake a thorough analysis of certain educational settings, in order to introduce innovative and active teaching-learning methodologies. These should be aimed at motivating students toward the search for, and internalisation of, knowledge and competences that enable medical trainees to take an active role in collaboration, knowledge-sharing, and hands-on experiential learning—through participatory and simulation-based pedagogies. Education begins

with a mobilisation toward self-knowledge—a practice of educating grounded in the understanding of the sources of our shared humanity. The centrality of our human condition is, in fact, evident in the processes of transformation and development that define our lives—through the biological, psychological, and human course of our experience (Righettini, 2024). One of the key elements in the teaching-learning process is undoubtedly *assessment*, to which have been added specific tools designed to capture the perception and self-perception of medical trainees in relation to their learning and internalisation of key competence areas. These areas are essential for the development of a mature professional identity, even amidst the inherent complexity of medical practice. Such innovative proposals are intended to serve as a starting point for ongoing reflection within specialist training schools, continuing to promote processes of personalisation and humanisation of care—also by means of the integral formation of the person-as-physician, achieved through competency-based learning. This process aims to conceptualise, design, and manage all formative activities that contribute to enhancing the quality of educational provision, with the objective of shaping the ideal profile of future medical specialists and ensuring leadership in their professional preparation (Turner et al., 2017). Furthermore, this approach allows assessment to be understood as an *interpretative process*, through which individuals gain a deeper understanding of themselves and open up to a journey of self-improvement via the development of personal awareness. Assessment thus emerges as a crucial tool within a genuinely pedagogical strategy—one in which assessment is not merely a tool for measurement, but a necessary step in the process of learning (Marrone, 2025). A medical pedagogy focused on the training of healthcare professionals must, by necessity, remain attentive to the various dimensions of learning (see Table 1).

The dimensions of learning	
1	scientific-cultural
2	methodological-organizational
3	Ethical-educational
4	socio-relational
5	psychological
6	existential
7	spiritual

Table 1. The dimensions of learning

Naturally, this theoretical-practical approach is conceived for medical and hospital contexts and is characterised by a *personalist, inclusive, welcoming, and sustainable value orientation*. It positions the *person-as-physician* as a scientifically competent and morally grounded individual—virtuous and well-formed. These aspects constitute the physician’s identity, situated between competence and care, where both dimensions must be pedagogically interwoven within professional life, the workplace, and the inner world of individuals, grounded in the deepest anthropological foundations.

Below (see Table 2), several medical training experiences are presented in which innovative methodological strategies have been applied.

<i>Flipped classroom experience</i>	
Group 1	Design an event with patient simulation at different levels of "challenge". In this approach, interpretative and decision-making training objectives have been recognized, aimed at strengthening reflection and critical analysis.
Group 2	Design a training event with the division of the class into 4 small groups, each with its own training objective, also providing for peer correction. This type of flipped-classroom linked to a team-based learning approach, has presented the criticality of not clearly defining the role of the teacher in the classroom, accentuating the risk of unguided training.
Group 3	Design a preventive remote activity, with an initial multiple-choice questionnaire, to be carried out in class, followed by correction and discussion in the classroom with students who have given incorrect answers. Afterwards, the class would be organized in group work on clinical cases with peer evaluation and final debriefing by the teacher. This modality presented two major criticalities: 1. the reduction of both home study time and, in fact, also classroom time; 2. the focus on the student who had given incorrect answers in the evaluation questionnaire.
<i>Video recordings and observation grids</i>	
The categories of videos that can be used in Medical Education have different strengths and weaknesses	
Direct video recordings of the lessons: teacher/exerciser is	The teaching activity can be explicitly prepared for recording, therefore without an audience and interruptions, or everything that happens in the classroom is recorded, including the teacher's

filmed while teaching	interactions with students (lecture capture), no sophisticated technology is required either in the recording phase or in the reproduction phase.
Video recordings available on the web	1. Lecture capture: the didactic impact of this type of video is the result of the interaction between the specific contents, the communicative effectiveness of the speaker, the presence of disturbing factors such as background noise or interference from the paraverbal aspects that accompany the speech 2. Voice over presentation: animated presentations, accompanied by a narrative voice, in which there may also be a summary window of the list of contents. The interactive dimension of the lesson is completely missing, favoring the distractibility of the user. 3. picture in picture: a filmically complex presentation, in which the speaker is superimposed on the slides, integrated by articulated animation effects, possible only with a complex and expensive post-production process. An extremely effective product is generated because it stimulates the different sensory channels at the same time, promotes cognitive integration, keeps attention alive, stimulates emotional activation
<i>The Interactive Laboratory</i>	
Group 1	Characterized by a proposal for integration between Medical Humanities and Internal Medicine. Scenes from the film "Caro Diario", episode "Medici", by Nanni Moretti (1993) were presented, in which a poor listening ability on the part of the various doctors consulted is highlighted, such as to lead to an incorrect diagnostic algorithm with a considerable increase in delays in the time of effective treatment of the patient.
Group 2	Characterized by a proposal for integration between Medical Humanities and Biochemistry. The starting point, in this case, was represented by an image widely used on sites that report the risks of alcoholism (the backlit silhouette of a man portrayed in front of a bottle of spirits). The proposed integration was between reflections on the social implications of alcoholism, the type of questions to be asked to the patient in this case, obviously the knowledge of specific biochemistry, the use of diagnostic tests, the difference between the

	chronic alcoholic or the sporadic event with regard to the alteration of the related metabolic pathways. An important fact, which emerged from the group's discussion, was the recognition of the need for multidisciplinary to deal adequately with this topic.
Group 3	It envisaged a proposal for integration between Medical Humanities and Human Anatomy. In this case, starting from images depicting expressions of pain taken from art history or contemporary media (various depictions of St. Sebastian or injured sportsmen), the anatomy of facial expression was analyzed, integrated with the prediction of the emotional and physical state of the patient through the use of anthropometric points of the face (e.g. according to the Facial Action Coding System), with the prediction of facial morphology following plastic or reconstructive surgery of the face and with the analysis of related bioethical issues.

Table 2. Examples of methodological strategies

In conclusion, the outcomes of the laboratory activities demonstrate that, through these methodologies, it is possible to identify, select, and plan *Medical Humanities* interventions deemed pedagogically appropriate and effective, and capable of actively engaging students.

"By uniting humility, hope, and generous dedication with rigorous competence and professionalism, the physician, the nurse, and every healthcare professional effectively practise mercy, of which they are called to be special witnesses in the face of human suffering" (Forte, 2017, p. 41).

This pedagogical reflection underscores the importance of medical education as a formational process—an ethical commitment and a call to which one must learn to respond, navigating between *science and conscience*.

Conclusions

Training educators adequately and motivating them to engage in meaningful pedagogical experiences is essential in promoting multidisciplinary integration and fostering the active participation of students. The relationship between *pedagogy and medicine* demands attention to, and respect for, the personal identity of the

other. This binomial is undoubtedly characterised by an intrinsic asymmetry—rooted in the doctor–patient relationship—which must be thoughtfully conceived, intentionally designed, and ethically oriented towards *holistic care*, *conscious caregiving*, and an *ethics of responsibility*. Such an approach should align with a mature professional deontology, while simultaneously transcending it through a genuinely virtuous educational perspective (Spinsanti, 2025).

"Thus, it is not only a matter of producing good doctors in the sense of being technically qualified, but also good in the sense of possessing attitudes and values that allow them to improve healthcare delivery" (ten Have, 2016, p. 20).

Medical education today faces a significant challenge: to deliver training that integrates technical objectives, promotes research, and encourages the resolution of specific clinical problems—while also enabling learners to reframe these within a unified, holistic, and human perspective. This vision also highlights the relevance of *social dynamics*, which involve a series of collective, interactive, and intersubjective transformations. These are aimed at developing *axiological competences*—value-based skills that are applicable across diverse and ever-changing contexts, in close connection with the lived experiences of individuals, whether they be healthcare professionals or patients.

Author contributions

Antonio Ascione, introduction and conclusion

Michele Corriero, par.2

Giovanni d’Elia, par.3

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