

THE ROLE OF ART PEDAGOGY IN THE DEVELOPMENT OF CRITICAL THINKING OF FUTURE DOCTORS.

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Annotation. The paper is a part of a larger effort converged within a research project funded by the European Commission (Critical Thinking across European Higher Education Curricula – Crithinkedu, which looks for evidence that Critical Thinking is a specific domain and if there are different opinions among experts (employers, teachers, researchers) on what Critical Thinking should bring to their domain. Methodologically, the present research is an exploratory literature review, an attempt of systematicity, that tries to put together in one place the preoccupations and results of worldwide researchers in Humanities, Arts and Culture regarding the role of Critical Thinking in their domains. The results showed an unexpected situation, the main research question in the analysed papers is not how critical thinking is making us better artists or Humanities experts, but how these fields make us better critical thinkers. Searching for generic key terms like Humanities, didn't return much relevant information, but searching for specific domains, like Literature, History, Linguistics, Philosophy had a better chance of finding papers concerning Critical Thinking. It means that the topic is far more complex than it looked at first glance and it requires special attention on each case or sub-domain.

Keywords: Critical thinking, Critical thinking dispositions, Higher education, Humanities, Arts.

Introduction

Historically, there is a connection between medicine and pedagogy in our culture known. Thus, Hippocrates, the founder of theoretical medicine, was not only a doctor who heals, but also the patient's appearance, behavior, attitude to the profession emphasized the need to be educated. The emergence of universities in medieval culture pedagogy turned into scholasticism, and the scholastic and dogmatic doctor in medical education played a leading role in its formation. Natural science of culture during the Renaissance, the emergence of mechanics, geographical discoveries and inventions, literature and art development to the formation of a new pedagogy and medicine purified from scholasticism and to realize that these sciences are the same in their efforts to explain the essence of man helped. Renaissance medicine and pedagogy have one goal – man to "correct and improve" its nature. The pedagogical trinity of the Renaissance was formed: classical education, physical education it is necessary to form a healthy personality and educate an active citizen. Pedagogy of medicine A classic example of influence can be the studies of Michel Montaigne. In the present modern era, the importance of medicine is increasing. creative thinker perfect individuals with a broad world view and capable of active action are being formed. Doctor-philosopher and pedagogue John Locke in his treatise "Thoughts on Education". Unit of medical-hygienic and socio-moral education of children common to the period expressed his idea. It should be noted that the relationship between medicine and pedagogy. It has become significant and relevant in our republic. Currently, medicine is paternalistic model is being formed, it is the doctor's reputation not only as a healer of physical diseases, but also a spiritual teacher is determined by his spirituality, level and perfect humanity. Medicine and pedagogy with the development of capitalist relations in the XIX century The relationship between medical or demographic statistics is its own lens found its expression. Wilhelm August Lay's "System of Pedagogical Activities" at the beginning of the 20th century became famous. A pedagogic treatise authored by him further biologized the field, this made it possible to confirm the unconditional syncretism of medicine and pedagogy. Nature in the 19th century and the unity of the laws of social development, that is, the comprehensive scientific about man to learn to educate a person in all aspects, taking into account knowledge the foundations of combining naturalistic and humanitarian approaches were laid.

Main part. The practice of medicine is concerned with the knowledge and treatment of both physical and mental illnesses aimed at doing. Scientific and practical pedagogy is socialization, formation and aimed at knowing and eliminating the diseases that occur as a result of their formation. Due to his professional activity, the teacher is directly related to children and their should take into account the level and condition of health. Medicine, which is a human object, pedagogy is the same on moral grounds. For one and another form of activity "Damage" don't do" principle is characteristic. Medicine and pedagogy in their content as dynamically developing systems reflects the processes taking place in society and culture. Their unity effectiveness only the global anthropocultural crisis that is currently experiencing considering possible. Thus, the relationship between medicine and pedagogy in culture nature with existing ideas about the essence of man in the present period of history is determined. The study of this problem is medical and pedagogical in ancient Greece has a very deep history based on systems. Pedagogy formed during the Renaissance three (providing a person with classical education, forming a physically healthy person and an active citizen must be educated) later Ya.A. Kamensky, J. Locka, A. Sikorsky et al reflected in his works. They are pedagogy to medical practice, and medicine emphasized the need to enter pedagogical activity, which in turn is a person allows to create a complex theory of "Medical pedagogy". Medicine and pedagogy is united on moral grounds, in the generality of deontological requirements.

In our age of expanding international contacts and universalization educational system, there is a need to rethink the role of foreign language in the training of young professionals, including doctors. It requires building a new effective model of teaching foreign languages, developing modern methods and approaches, as well as the effective use of traditional techniques, which is especially important with a limited number of hours allocated for subject in medical school.

Great opportunities of modern computer facilities and information technologies make it possible to assign some of the functions to these learning tools the teacher and part of the student's functions adopted in the classical form of education.

Recently, the Internet has been actively involved in the educational process. It's connected with the simplicity and relatively low cost of connecting to the network, the ability to simulate any training model and provides interaction on any

distance. It is believed that it is most effective to use distance learning (DL) when accompanied by programs of basic education, additional and second higher education, postgraduate studies, preparation of applicants, distance learning olympiads and remote support of branches.

Now, according to the generation theory, generations Y and Z are studying at the university, which actively use modern technologies from an early age and consider them in as a possible learning tool. These students are characterized by the so-called

clip thinking. They perceive short, bright, clear shapes better presentations characterized by a change of images in the absence of context, but have problems in communication. Increasingly, experts are talking about changing the approach to material presentation. DO allows you to modify the presentation format. Priority can be bright, clear and visual presentations with figurative and memorable forms.

It is known that distance learning (DL) is primarily a process acquisition of knowledge, based on the totality of modern information technologies that provide interactive interaction between students and teachers, providing opportunities for independent work continuous self-education and self-improvement. At the same time, an active role teacher is no less important than in classroom work, since his

the task is not only to verify the knowledge of the ward, but also to make a decision on adjusting the training program to achieve the best assimilation passed material.

DO is not a spontaneous process, but provides for a development stage design, definition of goals, objectives, content, methods, development of plans etc. At the same time, the relevance of methodically competently organized control over independent learning activities of students, the importance of analysis progress of their knowledge, skills and abilities. Self-control is also important the implementation of which is helped by the keys to the tasks, detailed instructions for their implementation, proposed models for their implementation. An important aspect of DO is that it provides information transfer at any time, at any distance and in any place, provides access to various sources of information, provides an

individual approach, allows work in a familiar environment, avoiding stressful situations that sometimes arise in the audience. opportunities.

It is believed that the educational goal of learning is realized through the attitude teaching to the language and culture of its speakers and involves solving problems, ensuring the formation of: a) respectful and benevolent attitude towards people whose language has become the subject of study, their culture and traditions, which

promotes the development of mutual understanding and tolerance; b) systems of moral values and evaluative-emotional attitude to the world; c) understanding the importance learning a foreign language and the need to use it as a means of communication in conditions of international cooperation; d) a sense of justice, conscious attitudes towards moral deeds and actions of people, the desire to understand situation, make the right moral choice. Close attention to ethical standards in helping professions is due to the fact that these specialists work with people who need help, dependent on other people, living in an environment for which they sometimes burdensome and who tries to get rid of them, not to mention the fact that in the field of medical care, a person's life itself can depend on a specialist. For the performance and implementation of their professional duties

helping professionals: a nurse, a practical psychologist, social worker and educator, is required as a sufficiently serious vocational education, as well as certain personality traits, ensuring readiness to work with people in difficult life circumstances (illness, stress, emergency, etc.). Can distinguish two aspects of the professional functioning of the helping specialist: role-playing and personal. Ethical requirements appropriate to the professional role set out in professional code of ethics, are, as a rule, prohibitive. They must be known and followed, since the code of ethics, first of all, provides the safety of the person being assisted. The second aspect concerns the qualities personality of a specialist, his personal maturity and moral reliability, worldview and value systems - here we are talking about personal inclusions specialist in interaction with the client. These two aspects are different

motivation of moral professional behavior. In the first case, this is external motivation ("it's necessary", "for violating the norms sanctions will follow", "I must do this", etc.). specialist in this case. functions at the role level, its goal is the clear execution of role functions at the level of interaction "specialist - patient (patient, client)". Flaw functioning of a specialist at the role level is that in this case, even with good knowledge of ethical standards, to guarantee the safety of the subject, assisted requires external oversight.

Moral reliability - the ability to comply with the requirements of the professional code of ethics in difficult and unforeseen situations of interaction with people, caught in crisis situations and, in connection with this, are in difficult mental states. Moral reliability, required in the work of all those who help specialists, both in the field of medicine and social work, and in the activities teachers and psychologists working with orphans, street children, disabled people, with people without a fixed place of residence, people of advanced age, lost the ability to self-care. Moral integrity is essential for experiencing unforeseen difficulties associated with unplanned lengthening of the working day and the performance of unpaid services, the need personal participation in the troubles and problems of the ward, as well as with interaction with socially and mentally inadequate clients. An important quality of moral reliable professionals is responsible for their behavior, recognizing themselves the source, the culprit of one's own behavior, as in the case of the fulfillment of moral requirements, as well as in case of their violation. Moreover, it is not only the ability resist the pressure of the situation and circumstances that incline to violate moral standards, but also a sustainable decision and the ability to always do so. Naturally, scientific and technological progress has an impact on both content, as well as forms and methods of teaching. Widespread use of training videos, educational computer programs not only complements the traditional training workshop, but also improves it. Today, in an age of developing accelerated pace of computer technology, a serious alternative to the use biological experiment in the process of teaching pathological physiology

can and should make multimedia presentations of educational material. Good multimedia presentation of lectures or classes with well-selected and successfully arranged (in accordance with the topic and objectives of the lecture or class) illustrations containing information about the results of not one, but several experiments, including chronic, rather complex, time-consuming, multifaceted, revealing the stage-by-stage inclusion and development of various links of pathogenesis a specific form of pathology or the

most complex and important issues of general nosology, supported by clinical observations and animations, are not able to just replace the experiment. Significantly increasing the completeness of information, such presentation expands the cognitive potential of the material presented, noticeably increases the efficiency of a lecture or lesson, contributes to optimization of the educational process as a whole. Separate demonstrations requiring an experiment on dogs, replaced by the student's work on analytical comprehension and design ready-made protocols of experiments offered to him, based on many years of scientific developments of the staff of the department, serious publications in periodicals medical press, adapted to the tasks of the subject, or compiled taking into account results obtained earlier in the annual experiments in groups. The use of thematic situational tasks in the classroom is another real way to effectively replace the traditional form of education with educational research work of students. Today, almost all classes at the department accompanied by the solution of situational problems. Development of situational tasks, including number and including the results of experiments corresponding to the topic of the lesson, provides training for the logical thinking of students, encourages them to take the correct decision regarding the essence of the observed in the body of a sick person or experimental animal phenomena. Ability to analyze, compare, take into account and use a large volume, sometimes seemingly contradictory information and build on this basis a competent reasonable conclusion about the expected form of pathology in a particular patient, its possible causes and mechanisms of development, to evaluate in some cases the most probable prognosis disease is acquired in the process of solving complex situational problems. Many years of experience in using this type of work allows us to highly appreciate this form of education. One of the most difficult topics for students to understand is the section dedicated to the mechanisms of intracellular signal transmission. At the same time, in this section in the medical school program considers at least four signaling mechanism, which already causes difficulties for perception. In the traditional presentation of material on this issue, classical textbooks present the material in text form with one or two diagrams. Lots of factual material when describing a multi-stage dynamic process and the appearance of a completely new terminology causes serious difficulties for the study of this topic. Studying intracellular signal transduction systems is necessary for the formation of professional competencies of a doctor, since this section is directly related to mechanisms of action of hormones, drugs, vitamins and many other biologically active substances; Moreover, this knowledge will be used later in the study of the course of pharmacology. For the purpose of facilitating understanding and memorization, students were asked to break into groups of 2-4 person, independently shoot a video dedicated to one of the signal mechanisms. At the same time, they themselves had to decide in what form and with what means they will use to implement this project. Work turned out to be unique and very interesting. The need to develop pedagogy within medical education to facilitate changes in the way medicine is taught has been clearly identified. For example, the Lancet Commission in their report on medical education opined that medical school curricula were currently not fit to meet societal demands, and were "outdated and static". Developments in the pedagogy of clinical subjects can help to create the medical schools (and so curricula) fit for the twenty-first century, through the dissemination of evidence-based pedagogies for instruction, for which there is clearly a demand both in terms of societal pressure and but also regulatory requirement. One of the key features of pedagogy's function within clinical subjects is that they can be co-produced with patient partners or with input from the public perspective, or from other clinical professionals. However, medical educators perpetually have to be cognizant that their work and its content adheres to the stipulations of the General Medical Council, Medical Schools Council, the Anatomical Society and the College of Paramedics etc. who have a role in determining what the clinical students are taught. It is important in medicine and allied healthcare professions that pedagogies be developed in a highly inclusive manner and that are representative of a variety of stakeholders in medical and health professions education.

There are essentially two different investigative positions one can employ to analyse pedagogy in relation to curriculum design and teaching methodologies within the environments of medical schools. That is to say, we can look at the variance of pedagogical strategies between subjects, or within subjects themselves. In a very basic manner, one can simplify these areas down to the following binary set:

1. Pedagogies of individual subjects taught as part of a curriculum or elective
 1. Example: Pedagogies for Teaching Anatomy

2. Pedagogies of topics or themes taught across clinical or medical curriculums

1. Example: Pedagogies for teaching gendered issues in medicine

Included within these two categories are both the traditional subjects that students will have to learn which will typically draw upon standard pedagogical formats, lectures, group work etc. However, this dyad also reflects subjects that medical schools are currently adapting to incorporate. I.e. the themes are driven by innovations in medical schools to produce the doctors of the future. For example, the increasing role of patient centred medicine, the increasing use of technology in the teaching of MOOCs, or other online/distant teaching platforms, in addition to mobile applications and E-health, i.e. health technology methodologies. This is why the division between subject and theme when providing an overview of a discipline is useful, as it shows not just what exists but also the struggle institutions face in adapting to new disruptive technologies and so societal pressures.

In addition to pedagogical strategies that focus on individual areas of the curriculum, one could focus on themes that might emerge in several areas across a curriculum. For example, introducing social justice concerns, ethics or gender-related issues in medicine. Given the political and social environment within which medicine and medical education function, it is to be expected that there is a significant scope for the development of pedagogical strategies across thematic areas.

Moreover, there is scope for research about clinical pedagogy to provide a focus on new teaching pedagogies that are present across different areas of medicine, and or other clinical subjects combined, such as simulation. There is also scope for subjects that simply address the use of pedagogical techniques that are less used in medicine, such as the flipped classroom models of teaching. In addition, other cross-curriculum themes that cannot be ignored include: the connection of pedagogy to assessment format within medical schools, the role of reflection, feeding back and feeding forward. In the next section, we will look at some specific examples of how pedagogies have been developed in clinical subjects both in terms of individual subjects but also in thematic areas.

References

1. Nehls N. Narrative pedagogy: Rethinking nursing education. *Journal of Nursing Education*. 1995;34(5):204-210
2. Parker BC, Myrick F. A critical examination of high-fidelity human patient simulation within the context of nursing pedagogy. *Nurse Education Today*. 2009;29(3):322-329
3. Brown ST et al. A review of narrative pedagogy strategies to transform traditional nursing education. *Journal of Nursing Education*. 2008;47(6):283-286
4. Diekelmann N. Narrative pedagogy: Heideggerian hermeneutical analyses of lived experiences of students, teachers, and clinicians. *Advances in Nursing Science*. 2001;23(3):53-71
5. Ironside PM. Creating a Research Base for nursing education: An interpretive review of conventional, critical, feminist, postmodern, and phenomenologic pedagogies. *Advances in Nursing Science*. 2001;23(3):72-87
6. Whipp J. Rethinking knowledge and pedagogy in dental education. *Journal of Dental Education*. 2000;64(12):860-866
7. Bäckman B, Pilebro C. Visual pedagogy in dentistry for children with autism. *ASDC Journal of Dentistry for Children*. 1999;66(5):325-331
8. Feigal R. Guiding and managing the child dental patient: A fresh look at old pedagogy. *Journal of Dental Education*. 2001;65(12):1369-1377
9. Wayne J, Bogo M, Raskin M. Field education as the signature pedagogy of social work education. *Journal of Social Work Education*. 2010;46(3):327-339
10. Willems JA, Reed LF. Beyond delivery: A case study in e-learning for podiatry students. In: *World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education (ELEARN)*; 2007; Quebec City, Canada
11. Marshall H. Paramedic education: Developing depth through networks and evidence-based research—Finding the ideal pedagogy. *Journal of Emergency Primary Health Care*. 2009;7(2):1-2
12. Self D. The pedagogy of two different approaches to humanistic medical education: Cognitive vs affective. *Theoretical Medicine*. 1988;9(2):227-236

13. 13.Stetzik L et al. Puzzle-based versus traditional lecture: Comparing the effects of pedagogy on academic performance in an undergraduate human anatomy and physiology II lab. *BMC MedicalEducation*. 2015;15(1):107
14. 14.Kalaniti K, Campbell DM. Simulation-based medical education: Time for a pedagogical shift. *IndianPediatrics*. 2015;52(1):41-45
15. 15.Dyson S. *Critical Pedagogy in Nursing: Transformational Approaches to Nurse Education in a Globalized World*. London: PalgraveMacmillan; 2017
16. 16.Sataloff RT. *Vocal Health and Pedagogy: Science, Assessment, and Treatment*. Vol. 2. SanDiego: PluralPublishingInc; 2017
17. 17.Archer J, de Bere SR. The United Kingdom's experience with and future plans for revalidation. *JournalofContinuingEducationintheHealthProfessions*. 2013;33:S48-
18. 18.Archer J et al. *The Evidence and Options for Medical Revalidation in the Australian Context*. MedicalBoardofAustralia; 2015
19. 19.Triggle N. Student doctor numbers to rise by 25%. 2016 [cited 02/08/2017]; Available from: <http://www.bbc.co.uk/news/health-37546360>
20. 20.Ziv A, Ben-David S, Ziv M. Simulation based medical education: An opportunity to learn from errors. *MedicalTeacher*. 2005;27(3):193-199

1. Friedman CP, Donaldson KM, Vantsevich AV. Educating medical students in the era of ubiquitous information. *Med Teach*. 2016;38:504–9.
2. Johnston SC. Anticipating and training the physician of the future: the importance of caring in an age of artificial intelligence. *Acad Med*.2018;93:1105–6.
3. Obermeyer Z, Emanuel EJ. Predicting the future—big data, machine learning, and clinical medicine. *N Engl J Med*. 2016;375:1216.
4. Pershing S, Fuchs VR. Restructuring medical education to meet current and future health care needs. *Acad Med*. 2013;88:1798–801.
5. Gushulak BD, Weekers J, MacPherson DW. Migrants and emerging public health issues in a globalized world: threats, risks and challenges, an evidence-based framework. *Emerg Health Threats J*. 2009;2:7091.
6. Labonté R, Mohindra K, Schrecker T. The growing impact of globalization for health and public health practice. *Annu Rev Public Health*. 2011;32:263–83.
7. Bullen M, Morgan T. Digital learners not digital natives. *La Cuestión Universitaria*. 2011;7:60–8.
8. Sandars J, Morrison C. What is the net generation? The challenge for future medical education. *Med Teach*. 2007;29:85–8.
9. Boysen PG, Daste L, Northern T. Multigenerational challenges and the future of graduate medical education. *Ochsner J*. 2016;16:101–7.

1. Friedman CP, Donaldson KM, Vantsevich AV. Educating medical students in the era of ubiquitous information. *Med Teach*. 2016;38:504–9.
2. Johnston SC. Anticipating and training the physician of the future: the importance of caring in an age of artificial intelligence. *Acad Med*. 2018;93:1105–6.
3. Obermeyer Z, Emanuel EJ. Predicting the future—big data, machine learning, and clinical medicine. *N Engl J Med*. 2016;375:1216.
4. Pershing S, Fuchs VR. Restructuring medical education to meet current and future health care needs. *Acad Med*. 2013;88:1798–801.
5. Gushulak BD, Weekers J, MacPherson DW. Migrants and emerging public health issues in a globalized world: threats, risks and challenges, an evidence-based framework. *Emerg Health Threats J*. 2009;2:7091.
6. Labonté R, Mohindra K, Schrecker T. The growing impact of globalization for health and public health practice. *Annu Rev Public Health*. 2011;32:263–83.
7. Bullen M, Morgan T. Digital learners not digital natives. *La Cuestión Universitaria*. 2011;7:60–8.

8. Sandars J, Morrison C. What is the net generation? The challenge for future medical education. *Med Teach.* 2007;29:85–8.
9. Boysen PG, Daste L, Northern T. Multigenerational challenges and the future of graduate medical education. *Ochsner J.* 2016;16:101–7.