### UNIVERSITY "ST. KLIMENT OHRIDSKI" FACULTY OF EDUCATION BITOLA

# Third International Conference EDUCATION ACROSS BORDERS

## EDUCATION AND RESEARCH ACROSS TIME AND SPACE

(1100<sup>th</sup> Death Anniversary of St. Clement of Ohrid)



6-7 October 2016 BITOLA

# **Conference Proceedings**

### University "St. Kliment Ohridski" in Bitola Faculty of Education



## Third International Conference "Education across Borders"

### **Education and Research across Time and Space**

(1100<sup>th</sup> Death Anniversary of St. Clement of Ohrid)

6-7 October 2016 Bitola

#### **Organizing Institutions:**

University "St. Kliment Ohridski" in Bitola (Faculty of Education in Bitola) together with the University "Fan S. Noli" – Korçë (Faculty of Education and Philology in Korçë), University of Niš (Faculty of Education in Vranje and Center for Byzantine-Slavic Studies in Niš), Plovdiv University "Paisii Hilendarski" (Faculty of Education in Plovdiv) and Adam Mickiewicz University in Poznań (Faculty of Polish and Classical Philology and Institutes for Slavic and Polish Philology in Poznań).

#### **Plenary Lectures:**

Dimitar Pandev, Faculty of Philology Blaže Koneski" in Skopje A Word on the Slavic Patterned Teachings

Grozdanka Gojkov, Serbian Academy of Education in Belgrade Education and Research in Postmodern World

#### **Conference topics:**

- Ohrid Literary School The First Slavic University
- Language & Literature
- Pedagogy & Psychology
- Science, Math, ICT
- Social Sciences

#### **Program Committee:**

Sašo Korunovski, Rector of the University "St. Kliment Ohridski" - Bitola Ali Jashari, Rector of the University "Fan S. Noli" - Korçë Bogumiła Kaniewska, Vice Rector of the Adam Mickiewicz University - Poznań Benita Stavre, Vice Rector of the University "Fan S. Noli" - Korçë Valentina Gulevska, Faculty of Education - Bitola Sunčica Denić, Faculty of Education - Vranje Rumjana Tankova, Faculty of Education - Plovdiv Dragiša Bojović, Center for Byzantine-Slavic Studies - Niš Bogusław Zieliński, Institute for Slavic Philology - Poznań Dobri Petrovski, Faculty of Education - Bitola Jove Dimitrija Talevski, Faculty of Education - Bitola Donika Dardha, Faculty of Education and Philology - Korçë Vasilika Pojani, Faculty of Education and Philology - Korcë Slađana Ristić Gorgiev, Center for Byzantine-Slavic Studies - Niš Branko Gorgiev, Center for Byzantine-Slavic Studies - Niš Krzysztof Trybuś, Institute for Polish Philology - Poznań Božidara Kriviradeva, Faculty of Education - Sofia Galena Ivanova, Faculty of Education - Plovdiv Blagica Zlatković, Faculty of Education - Vranje Danijela Zdravković, Faculty of Education - Vranje

#### **Organising Committee:**

PhD Biljana Cvetkova Dimov, President of the Organising Committee MA Meri Stoilkova-Kavkaleska PhD Metodija Stojanovski PhD Dobri Petrovski PhD Jove Dimitrija Talevski PhD Ljupčo Kevereski PhD Zlatko Žoglev PhD Tatjana Atanasoska PhD Valentina Gulevska PhD Dean Iliev PhD Violeta Januševa PhD Daniela Andonovska-Trajkovska PhD Mažana Severin-Kuzmanovska PhD Gordana Stojanoska PhD Jasminka Kočoska PhD Danče Sivakova-Neškovska PhD Biljana Gramatkovski PhD Silvana Neškovska PhD Marija Ristevska PhD Milena Pejčinovska PhD Bisera Kostadinovska-Stojčevska MA Stela Bosilkovska

**Publisher** University "St. Kliment Ohridski" - Bitola Faculty of Education - Bitola Dean prof. Valentina Gulevska, PhD

#### **Executive and Editor-in-chief**

prof. Biljana Cvetkova-Dimov, PhD

**Cover** Aleksandar Gulevski

#### **Technical & Computer support**

Jove Stojchevski

CIP - Каталогизација во публикација Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

37.091.3(062) 821.163.1.09Св.Климент Охридски(062) 271.2-36Св.Климент Охридски (062)

INTERNATIONAL conference "Education across borders" (3; 2016; Bitola)

Education and research across time and space [Електронски извор] : conference proceedings : (1100 th death anniversary of St. Clement of Ohrid) / Third international conference "Education across borders", 6-7 October 2016 Bitola. - Bitola : University "St. Kliment Ohridski" in Bitola, Faculty of Education, 2017

Начин на пристап (URL): <u>http://www.pfbt.uklo.edu.mk/eab</u>. - Текст во PDF формат, содржи 1081 стр., илустр. - Наслов преземен од екранот. - Опис на изворот на ден 14.07.2017. - Библиографија кон трудовите

ISBN 978-9989-100-50-5

а) Климент Охридски, св. (840-916) - Собири б) Образование и настава - Собири СОВІЅЅ.МК-ID <u>103722250</u>

#### BIOETHICS EDUCATION: LEARNING PERSPECTIVES AND MULTIDISCIPLINARITY

#### Marija Todorovska

Institute for philosophy, Faculty of philosophy, University "Ss. Cyril and Methodius", Skopje, Macedonia marija.todorovska@fzf.ukim.edu.mk

#### Abstract

Technological progress, bio-medical advances, socio-economical inequalities and the problem of human rights and well-being, access to the advantages of scientific development, dedicated care for the environment and for the future become distinguishing characteristics of the present, and, accordingly, distinct and pressing issues in the rapidly expanding sphere of bioethics.

Bioethics education and a comprehensive education with bioethical sensibility become increasingly important in the light of the challenges of the new epoch. The article briefly explores two approaches to an appropriate modeling of an open, inquisitive and pluriperspective worldview in dealing with problems concerning life (*bios*): a nurturing of a broad sensitivity about the importance of the care for the living on all levels concerning issues pertaining to, or bordering with, a strictly bioethical realm; and a specified teaching and learning of the key concepts of the interdisciplinary and pluriperspective area of integrative bioethics. The former encompasses a consciousness typical for universal ethics and the encouragement of rationality paired with empathy, the latter – a study of pressing key concepts of bioethics in a staggeringly evolving world where problems of bioethics abound. An overview of the need for bioethics education is shown, both as a background knowledge and as a life-long learning goal, and that need is placed in the context of multidisciplinarity. The conceptualisation of bioethics education is explored in the context of institutionalised learning and in its necessary openness to a pluriperspective approach in understanding the present and especially, in anticipating the future.

Key words: bioethics, education, sensibility, multidisciplinarity, pluriperspectivity

#### Introduction

Progress in technology and life-sciences, achievements in bio-medicine, groundbreaking research and re-envisaging of human potential are shaping up our present, making way for a future with reevaluated concepts of morality, humanness and the understanding of life in general. Dedicated care for the environment, sensibility for the living, a sense of right and wrong, and a need for remedying injustice and inequalities are increasingly gaining importance. This puts the need to teach and learn versatile and comprehensive ways to understand man's role in the world on a level of openness and encompassment unparalleled in previous attempts to understand concepts of *bios* and the implications of man's interventions on nature. The sphere of bioethics is expanding in accordance with the issues stemming from these transformations in science and in our approach to life. The ways it gets approached change, converge, expand and proliferate in the public sphere, through popularised science, media coverage, and especially, through education. Bioethics education, in a strict academic sense, is the study of the discipline, its history, paradigms, challenges and merits. However, it is a pluriperspective discipline, serving as a background, a backdrop, a scholarly plateau of approaches of morals and ethics applied to problems of life in medicine, technology, science, anthropology. Therefore, it is always quite broad and multifunctional, and while it is necessary in academic settings, it cannot be confined in just a few select classrooms of medical schools and programs of scientific research. Bioethics serves as an orientation background for decision-making in issues in multiple disciplines. The education in bioethics, therefore, is multi-layered and pluriperspective, aiming at equipping students with comprehensive knowledge about ethical dealing with issues of life in science and technology.

#### Learning and employing bioethical sensibility

Anywhere science and technology raise issues of the ontological status, treatment, endangerment and preservation of life, a knowledge of bioethics is required. Anytime life circumstances create a situation of injustice in well-being, health, access to medical care, access to the advantages of science or dangers due to scientific experimentation, bioethics offers a pluriperspective sensibility. In worldviews of inquisitiveness, curiosity and want of progress, the challenges of the epoch get taught mainly in two complementary, and different, but never diverging approaches – through the nurturing of a wide-reaching sensitivity about the importance of care for the living, and through a specified teaching and learning of key concepts and questions of bioethics. The former consists in building a consciousness for the applicability of ethics to problems of *bios*, and the latter consists of the study of key concepts of life-sciences and of ethics, engagement of students in learning about the importance of respect for life, expanding worldviews, enriching the grasps of biological and cultural diversity, employing this sense of cultural diversity in the pluriperspective way of bioethical thinking, etc. Technological advances tend to be overwhelming in the rapidly evolving world, and progress for progress' sake is dangerous, should its implications not be foreseen and accordingly mitigated. Trends in scientific development are sometimes tried and tested,<sup>288</sup> and their implications are known and systematised, thus allowing a calm and profound understanding and study, and sometimes the galloping interventions on life require ad hoc bioethical perspectives, alternatives and proposed solutions, and so a fine balance perseveres between permanence and chance, stagnation and innovation.

The sense of the importance of life and the knowledge that respect for life matters, should be learned at a young age. The sensibility for otherness, for the value of life in varying forms, and for the responsibility of the individual should be systematically encouraged. An empathic worldview presented as a norm in schools and continuously emulated in the face of new challenges and new ways of overcoming issues of life is extremely important. This sensibility about the living is bioethics of pluriperspectivity and multidisciplinarity in facing questions about life (Čović, 1998, p. 565), and the better it is recognised and nurtured, the higher the objectives of bioethics are placed. The insistence on such sensibility encompasses a lifetime of respect for the living and the tackling of issues directly pertaining to, or indirectly connected with, the realm of bioethics. Bioethics education tries to bring together the rationality of scientific development and the empathy of being a moral acting

<sup>&</sup>lt;sup>288</sup> In the highly segmented, fragmented, sub-sub-specialised realm of modern science, wholeness and orderly framework have been replaced by ever-growing numbers of facets of intense focus. This is a problem of reductionism and mono-perspectivism – they are not only a deviation of a scientific-educational model or paradigm, but its very essence (Jurić, 2012, p. 86), the substantiation and justification of modern techno-bio-science. As Jurić elaborates, the problem is the emphasis (in the ideal entirety of the knowledge and science) put on the *one* segment of science that becomes the essential element of science and, finally, the only 'scientific science', and it is this monopoly, this unity of modern natural sciences and technology which tends to be the only valid form of understanding and directing of life (Jurić, 2012, pp. 86-87).

individual,<sup>289</sup> the orientation towards the future of technology and the growing concerns for justice and equity in an integrative bioethical framework, the sustain and anticipation of progress and the appreciation of the condition of the fellow living.

#### **Teaching bioethics**

Bioethics education is difficult to conceptualise, exactly because of bioethics' multidisciplinary involvement and its plurality of perspectives. So, the problem is not so much in the fact that bioethics is a young and budding discipline, but in the persisting reality concerning institutionalised teaching and learning, which is still struggling with the fluctuation of the pluriperspectivity of the discipline, as well as with its openness and proneness to incorporate newly arising problems about bios. Bioethics education seems like one of the most topical current endeavours, but it has yet to be established as necessary in fields concerning the acknowledgement of respect for life, and offered to everyone else (which would present another challenge of universalisation and leveling of perspectives, as well as culturally diverse approaches to some universal values). The need for a life-long nurturing of a bioethical sensibility is intensifying. On a practical level of a smaller scale, namely, in the logistics of the organisation of particular courses or classes of bioethics, there is an evident confusion in curricula planning. This is to be expected when such an overwhelmingly rich and expanding discipline is being contained within systematised, ageappropriate (depending on levels of study), and profile-appropriate frameworks (as an accompanying orientation background to disciplines in science, in philosophy or in law). While the substrates and structures of ethics programs tend to follow the traditions of schools of thought, national policies and cultural paradigms in different settings,<sup>290</sup> and there are some possibilities for comparative analyses and descriptive meta-accounts, bioethics education is unevenly distributed, not only on different continents and separate educational

<sup>&</sup>lt;sup>289</sup> Jürgen Mittelstrass identifies two types or aspects of knowledge – an instrumental one, knowledge towards practical uses, pertaining to the grasp of objective, exact sciences, and an orientation knowledge, inherent to humanistic and social sciences, not immediately or directly utilisation-bound, but creating an orientation for individuals and humankind (Mittelstrass, 1982). Wisdom and orientation belong together, he stresses, as an information world by itself is not yet an orientation world. When it comes to acquiring and dispersing knowledge, it is important to remember that information in the strict sense does not provide with orientation, but it belongs to a set of preconditions or foundations of orientation. Orientation knowledge (or 'socratic knowledge'), by contrast, may be defined as knowledge of aims and purposes, that is, as knowledge of what (justifiably) ought to be the case (Mittelstrass, 2010, p. 22).

A comprehensive education of bioethics includes information, but more importantly, ways to orientate from chaos of issues in decision-making and positioning into stances, to an array of perspectives offering options, calculation, accountability and layers of (practical) wisdom.

<sup>&</sup>lt;sup>290</sup>The positioning of a "divergence" between American and European bioethics is the most well-known division of traditions. The American version, founded by Van Rensselaer Potter and the conception of bioethics as a bridge to the future, is more of a biomedical ethics, and the earlier, but only later discovered as preceding, European one, founded by Fritz Jahr, is more on the metaphysical side. Potter was being dubbed "the father of bioethics" for a few decades, until an earlier father was discovered (thanks primarily to Hans-Martin Sass), the German theologian and pedagogue Fritz Jahr, and a new, European foundation of bioethics was acknowledged (About the coining of the term "bioethics" and a chronological bibliography of Jahr's works in Muzur&Rinčić, 2011, pp. 133-139, a precise list on pp. 136-137). According to Jahr bioethics lies upon the presupposition of a moral duty not only towards people, but all life-forms, thus, he offers an enlargement of the Kantian categorical imperative: respect every living being in principle as an end in itself, and, when possible, handle it as such! (Jahr, 1926, pp. 604-605; Jahr, 1943, pp. 183-187).

Bioethics, however, intrinsically understood, cannot be just one side or line or strain, it is not attenuation of biomedicine or moral philosophy in techno-science, or just ecological ethics, it is a global ethics of *bios*. Education of bioethics depends on the tradition of its emplacement, but should be openly aware of its overwhelming comprehensiveness, and able to convey that in teaching and apply that in its objectives of pluriperspective analyses and orientation.

systems, but also within countries, districts, traditions and teaching cultures. One of the problems is that even bioethics experts themselves do not often have adequate information about what exists and what is lacking in the field of bioethics education (Ten Have & Gordjin, 2012, p. 99). The vulnerability of the programs exaggerates this, so do the lack of strategy for training of future educators and the conspicuous lack of communication between bioethics teachers, even within similarly structured systems that share the same teaching philosophy. The teaching programs in most cases (and one cannot generalise exactly due to the lack of suitable information on the status of all instances of bioethics teaching) depend on the enthusiasm of particular teachers, rather than a firm institutional basis. What is obvious after a brief research of the Balkan countries is that bioethics teaching strategies mirror what seems to be a world trend:<sup>291</sup> educators in the field do not know what their colleagues are teaching, they rarely share experiences and access to teaching materials, and learning goals vary significantly from districts, to countries, to regions. Despite the praises bioethics education gets (albeit the definition of it still being blurry), "... in most countries there is not an impressive lot of bioethics teaching" (Ten Have & Gordijn, 2012, p. 100).<sup>292</sup>Forty years ago only a handful of universities in the United States and in Europe had bioethics in their curricula, so it is obvious that bioethics education has come a long way, becoming mandatory for many medical and scientific profiles, and suggested for many more, and starts to pick up importance in secondary and even primary levels of schooling (which, granted, contributes to

<sup>&</sup>lt;sup>291</sup>The Rijeka Guidelines for Bioethics Education from 2011 may be useful for a grasp of the general idea of bioethics education (see *Jahr*, 2012, p. 162). However, these are merely guidelines and do not tent to pose as apodictic solutions for curricular planning and improvement, and yet, are quite helpful in what bioethics is about – providing orientation in substantiated and just decision-making.

<sup>&</sup>lt;sup>292</sup>One way to approach bioethics teaching on a university level, teaching hospitals, law programs and ethics courses in industry is through a "pragmatic" worldview (following the American way the seventies onward): medical care professionals learn necessary skills to face ethical dilemmas that appear in day-to-day operations, and this is sometimes expanded to most bio-medical profiles and to scientific research involving live subjects and general impact on the environment. This is necessary, but seems to be a bare minimum, a prophylaxis, focused on formally avoiding liabilities in medical and scientific conduct. It does not (necessarily) entail that medical professionals and scientists acquire in-depth knowledge of bioethics, what it means is that empirically, after having studied bioethics, professionals will have a point of reference if and when they confront some similar issues in their work. A set of basic key concepts which helps in determining whether a type of conduct is morally acceptable, whether a type of procedure is valid in terms of risk-benefit ratio, whether individual freedoms, and informed consent are being respected, whether a practice's implications would increase beneficence and decrease suffering etc., is an excellent foundation. And in this respect, three functional levels may be distinguished – a theoretical medical ethics, a medical ethics oriented towards a problem, and a medical ethics of groups bound by a shared interest (see Reiter-Theil, 2004). Clinical ethics meant an education in ethics for medical students, for medical professionals and everyone involved in improving patient care at the beginning of the '90 (see Pellegrino, Siegler and Singer, 1990), assuming that ethics training would help the identification, analysis and resolution of clinical practice-induced ethical problems. It is important that philosophers, theologians and other representatives of the humanities were deemed crucial in establishing this process. A decade later, in re-evaluating these viewpoints, the authors (Singer, Pellegrin, Siegler, 2001), admit that there still are many problems, and insist on the need for a continual evaluation of education of bioethics.

However, as long as ethics applied to science and medicine is considered a mere corrective of failures in professional behaviour, no new horizons open for bioethics education to be appreciated for what it is: not merely a remedy against professional misconducts, but essentially an integrative framework of broad understanding and respect of life in a rapidly transforming world.

While training in bioethics helps to remedy professional mistakes and misconducts, its real role is in preventing future wrongdoing and injustice, in humanising bio-medicine, attenuating technology, taming scientific progress for progress' sake. Encouragingly enough, there being a growing consensus about the ultimate goal of bioethics education – that it is to produce good health professionals and scientists (Goldie, 2000), its importance emerges also in the learning profiles for professionals dealing with health and science from a meta-level. The broader conception that bioethics education is seemingly moving towards goes beyond the early stages of the traditional models of merely identifying and analysing ethical issues, and towards using the emerging alternative models aiming to influence students' attitudes and behaviours (Fox et al., 1995).

the disorder in planning and executing the teaching). It still is in a state of confusion, though, lingering in a paradoxical state where everybody agrees how important it is, but little seems to be done to systematise and appropriately direct that importance.

Some of the goals of bioethics education could be identified as: fostering and promotion of moral imagination; learning how to recognise ethical problems; boosting analytical skills; developing a sense of moral duty and of personal responsibility; encouragement of the tolerance of criticism, disagreements and opposed opinions (Gosić, 2005, pp. 31-33). According to the founder of philosophy for children, Matthew Lipman, children are capable of abstract thinking since primary school age. Young children are able to think creatively and critically, and to employ multi-dimensional approaches. Philosophy for children can, therefore, work excellently with integrative bioethics, a discipline with a strong educational role. Such a relationship can bring (philosophy for) children to the formation and development of bioethical sensibility, seen as the epistemological and methodological paradigms of the disciplines are quite compatible.<sup>293</sup>Integrative bioethics, which is based on the model of pluriperspectivism, functions as an answer to the dramatic need for orientation knowledge, which would be opposed to epistemological reductionism, especially in issues on life and the conditions for its preservation (Katinić, 2012, p. 588). It is possible to develop bioethical sensibility in the context of engaged general public, only if educational processes are aware of its importance and intensely include ways to establish and develop it, so it can flourish in a setting of diverse information and moral acting. If philosophy for children is seen as a general philosophical didactics transcending factual instrumental knowledge, learning by repetition and the lack of critical thinking (in short – educational reductionism) by employing orientation knowledge, multidimensional thinking and pluriperspective approaches, then, its compatibility with bioethics can be quite fruitful. Experiences show (Katinić, 2012, p. 600) that children have capacity and great potential for asking questions pertaining to the field of bioethics, which means that bioethical sensibility can easily be nurtured in institutionalised learning, despite the difficulties that present themselves in terms of lack of life experience (presenting themselves like scepticism along the lines of "how can there be legitimate emotional stances without previous experience?") or direct experiences with nature (different cultures in learning yield different understanding of the environment -"what if nature is distant in urbanised settings?"). Schooling cannot do miracles in shaping one's bioethical sensibility, but the synergy of different subjects and courses that employ a dedicated care for the living and respect for otherness are certainly a good starting point.

In the region bioethics education seems neglected on a high-school (or secondary school) level, but the implementation in the third year of high-school in Croatia can serve as exemplary. The goals of bioethics education are the introduction to students to the general field of bioethics; training in independent critical dialogical participation in the articulation of moral dilemmas; focusing on man within the wholeness of life; offering bioethics as an answer to questions about life, ecology, biology, as well as medical bioethics and problems of self-deliberation (for a short overview of the learning framework and objectives, see Vulić, 2012, pp 25-26. Some knowledge of ethics (previously attained in the second year) is a prerequisite, for an operational basis in notions and problems is needed in order to direct them on life-sciences, humankind, the environment etc. High-school students should be introduced to philosophy and ethics, in order to grasp the realm of problems of bioethics, and be able to further enrich their knowledge in other fields, depending on their study profiles, like ethics in clinical medicine (see Čović, 2002). The expected results in teaching bioethics gravitate around the understanding of life as a wholeness and the distinction between anthropocentrism and biocentrism, the preservation of endangered species and the

<sup>&</sup>lt;sup>293</sup> See Katinić, 2012, for an attempt to highlight this relation.

possibilities of genetic manipulation of organisms. Students are expected to learn about the dangers of self-destruction and the opportunities for improvement of living standards, as well as to recognise problems of technological feasibility versus ethical plausibility.<sup>294</sup>

Potter and the conception of bioethics as a bridge to the future, as global ethics of bios, opened the path towards understanding the stakes in shaping and conditioning the future by acting in the present. The idea of bridging the past and present to reach a contemplated future (even when it cannot be planned out beforehand), and the importance of education and character-shaping, converge in the pedagogical concept by the Croatian philosopher Pavao Vuk-Pavlović, a professor at the Faculty of Philosophy in Skopje for several years. Education is a process of creation, involving the educator and the student, a creation of love. It is an activity continuously encouraged by this love through which values are being formed, and, thanks to which, the future arrives. The future, regards Vuk-Pavlovic, is not something that is temporally about to happen, something that necessarily comes in a chronological manner, but a time in which, certain life values are shaped trough creation and come to fruition as a result of the joint dedication of educator and apprentice. The future is "born" by living life and creating values (Vuk-Pavlović, 1932, pp. 29-30).<sup>295</sup>Educational actions and processes do not serve to some imaginary, illusionary future, but a future which will surely become present, actualised through values. Education can only mark its results in the new (always next) generations, and only in the future can it be determined whether it was appropriate and "good" (Vuk-Pavlović, 2008, pp. 28-31).

Dejan Donev observes that in Macedonia, the true foundation of bioethical consciousness and the development from ethics to bioethics is owed to a man who was neither a philosopher nor an ethicist, but biologist Siniša Stanković, an ardent proponent of the principle (illustrated through examples of Ohrid lake) that when examining life environment, nothing can be examined properly unless the inter-dependence of all the parts of the whole and their mutual influences are taken into account (Donev, 2010, p. 114). The plurality of teaching perspectives in bioethics aside, Macedonia is still very far from world trends, due to the fact it has only recently introduced courses in ethics in high-school curricula (2003) and in grade six of primary school, thanks to the continuous efforts of Kiril Temkov. Donev sees this as a problem – ethics has barely been established, and bioethics education seems unattainable, not because of a lack of bioethical sensibility, but because of the conspicuous lack of institutional planning. The pluriperspectivism bioethics employs, its tendencies to unify knowledge and approach life from different perspectives is already present in the Macedonian educational system, Donev remarks, so, bioethics can easily be rendered evident, rather than implicitly present and in need to be unearthed (Donev, 2012, pp. 32-33). Bioethics (as bioethics, ethics in research and medico-clinical ethics) is included in courses in the humanities, natural sciences and bio-medical sciences in Macedonia, but needs to be expanded on a highs-school level as a start (and then even as an option for young children in primary school), as a necessary educational tool for shaping individuals concerned about the status, treatment and future of bios.

#### Conclusion

Bioethics education is rapidly gaining in importance in the staggeringly fast evolving world of science and technology, for a nurtured and developed bioethical sensibility and a solid basis of key concepts of bioethics grant a knowledge in pluriperspective decision-

<sup>&</sup>lt;sup>294</sup> For a comprehensive overview of the definitions of bioethics in courses offered to students of medical and healthcare profiles in Croatia see Gosić, 2007. For an account on bioethics education in clinical medicine see Frković, 2007.

<sup>&</sup>lt;sup>295</sup> More detailed in Vuk-Pavlović, 2008, pp. 23-26.

making. The problems a consistent and comprehensive education in bioethics faces are caused by the pluriperspective nature of bioethics, and its need for open and comprehensive multidisciplinarity. Additional efforts should be put into establishing more ways for fruitful communication between educators of bioethics, as the care for *bios* is the legacy of the current generations inquisitively approaching the plurality and fragility of world.

#### References

Čović, A. (1998). Wissen und Moralität. Synthesis philosophica, 26 (2), 547-566.

Čović, A. (2002). Nastava etike u doba bioetike, *Metodički ogledi*. Zagreb, 9 (15), 9–16.

Donev, D. (2010). The development of bioethical consciousness in Macedonia: the absence of legislative dismissals and its consequences. *JAHR*, 1, 1, 113-122.

Donev, D. (2012). Raskorak makedonskog obrazovnog sustava i svjetskih obrazovnih tendencija s obzirom na (bio)etičku edukaciju. *JAHR*, 3, 5, 29-36.

Ethics. Journal of Clinical Ethics, 1 (3), 175–180.

Fox, E., Arnold, R. M., Brody, B. (1995). Medical Ethics Education: Past, Present and Future. *Academic Medicine*, 70(9), 761-769.

Frković, A. (2007). Bioetička edukacija u kliničkoj medicini. *Metodicki ogledi*, 14, 2, 33–48 Goldie, J. (2000). Review of ethics curricula in undergraduate medical education. *Medical Education*, 34(2), 108-19.

Gosić, G (2009). Definitions of Bioethics in Bioethics Education in Croatia. *Synthesis philosophica*, 2, 349–368.

Gosić, N. (2005). Bioetička edukacija. Zagreb: Pergamena.

*Health care and Philosophy*, 7, 17–29.

Jahr, F. (1926). Wissenschaft vom Leben und Sittenlehre. Mittelschule 40 (45), 604-605.

Jahr. F. (1943). Drei Studien zum 5. Gebot. Ethik: Sexual und Gesellschaftsethik 11, 183-187.

Jurić, H. (2012). Multi-Disciplinarity, Pluri-Perspectivity and Integrativity in the Science and the Education. *The Holistic Approach to Environment* 2, 85-90.

Katinić, M. (2012). Filozofija za djecu i mlade i integrativna bioetika.*Filozofska istraživanja*, 32 (3-4), 587-603.

Mittelstrass, J. (1982). Wissenschaft als Lebensform: Reden über philosophische Orientierungen in Wissenschaft und Univeristät. Suhrkamp: Frankfurt.

Mittelstrass, J. (2010). The loss of knowledge in the information age. Wenner-Gren

International Series, volume 85- From Information to Knowledge; from Knowledge to

Wisdom. De Corte, E., Fenstad, J. E., Eds. Portland: Portland Press, 19-23.

Muzur, A., Rinčić, I. (2011). Fritz Jahr – the Father of European Bioethics – a Preliminary Biography and Bibliography. *Synthesis philosophica*, 51 (1), 133-139.

Pellegrino, E., Siegler, M., Singer, P. A.(1990). Teaching clinical

Reiter-Theil, S. (2004), Does empirical research make bioethics more relevant? 'The

embedded researcher' as a methodological approach. Medicine,

Rijeka Guidelines of Bioethics Education (2012), JAHR, 3 (5), 162.

Ten Have, H., Gordijn, B., (2012). Broadening education in bioethics. *Medicine, Health Care and Philosophy*, 15 (2), 99-101.

Vuk-Pavlović, P. (1932). Ličnost i odgoj. Tipografija: Zagreb.

Vuk-Pavlović, P. (2008). Sabrana djela, vol. 4. HFD: Zagreb.

Vulić, N. (2012). Bioetičko obrazovanje u srednjoj školi. JAHR, 3, 5, 23-28.