BIOETHICS IN THE FUTURE: ECOLOGICAL UPBRINGING FROM A PRESCHOOL AGE. A DRAMA MUSIC WORKSHOP AS AN EXAMPLE

Abstract

In today's society, public opinion plays a large role in the adoption of various legal measures and regulations, including those related to the field of bioethics. This is why experts have a duty to inform the public in a timely and accurate manner, and it is up to educators to educate new generations to become responsible citizens who can make informed decisions. A few years ago, attempts were made to implement a project of health education and then one of civic education in schools. Those curricula predict the student will develop human, political, social, cultural, economic and environmental competences as a citizen of the class, school and local community. A spiral development model of introduction by educational cycles is envisaged, starting from the 1st grade of primary school. However, civic education is also addressed by the national curriculum for early and preschool education, which anticipates development of social and civic competences in children of this age. Bioethics and environmental issues are still not sufficiently transparent to the public. This is why proper environmental education from preschool age is very important. In preschool education, the proper approach is essential, and contemporary pedagogy emphasizes the importance of learning through play. The artistic fields are imposed as an ideal framework in which various contents can be accommodated. A drama music workshop that will help children develop
awareness of various issues through play is, therefore, an ideal training ground for educating a responsible and informed citizen. One such drama music workshop was organized for the purpose of demonstration on the occasion of the First Osijek Days of Bioethics. The story used in the workshop is from a picture book by Aleix Cabrera and Rosa M. Curto: Niko and nutrition. Through the play and the story, the importance of proper nutrition was emphasized to children and made them aware that it is necessary to know what they actually eat and where and how food comes from. This paper uses the workshop as a starting point when discussing the role of artistic fields and educators in creating a responsible and informed citizen in fields of bioethics and environmental issues and the importance of early and preschool education in the process.

**Keywords:** forming of public opinion, civics education, dramatic games, music games, drama-music workshop, bioethics

**Introduction**

In the last few years, Croatia has a growing need for legal regulation of certain topics in the sphere of bioethics. Sensitive areas, such as the positions of the state on abortions, religious freedoms and the use of GMO technology are under scrutiny of the public eye, and the role of public opinion in the creation of legal regulations has become significant, which we can confirm with an increased interest in public referendums when deciding the legal regulations of the Republic of Croatia.

If we assume that an average citizen of the Republic of Croatia decides on legal regulations from the area of bioethics this way, a question is asked – can that person decide on these matters if he or she is not sufficiently informed about them. There are known examples when public opinion was formed based on incomplete or even inaccurate information, and today there are also the so-called *spin doctors* who have a task of shaping public opinion on certain topics. Such manipulation of citizens becomes an ethical question in itself, and for now the only defence against harmful manipulations is critical thinking and informed citizens. Questions of bioethics are especially sensitive because the citizens of the Republic of Croatia are still insufficiently informed. The topic of GMO technology for human nutrition is the most apparent one here. Being informed and critical thinking are best accomplished by education, and experts agree that it can start in the earliest childhood. Here it is important to use appropriate education.
methods, especially adapted to the age of the child. Performing arts (dramatic art and music) play an important role here because they represent a good communication frame in the informing of children. They are the medium using which different topics can be learned, proper nutrition being one of them, thereby addressing the matter of opinion towards GMO food.

This paper discusses these questions using a qualitative analysis of current works. All the opened questions of this kind of a hermeneutic spiral are brought to full circle by the drama music workshop on the importance of proper nutrition for preschool children based on the picture book *Niko and nutrition*, performed for the occasion of the *First Osijek Days of Bioethics*. This workshop, therefore, becomes the starting and final point of discussion and an example of a successful answer to all the questions it touched upon. It also becomes a signpost for activities using which we can use today to ensure a responsible relationship towards the questions of bioethics in the future.

**The role of public opinion in creating legal regulations**

With as much as a cursory analysis of the number and offers of Croatian companies dealing with the research of public opinion, one can determine that it is a very present entrepreneurial niche: such research is the job of companies such as Target d.o.o., GfK, Institute of Social Sciences Ivo Pilar, Audeo d.o.o., Accent d.o.o. and Markot.tel d.o.o.¹

Not only private companies, but also public services, reach for the services of these agencies. For instance, the Ministry of Foreign and European Affairs contracted the agency Ipsos d.d. to research public opinion on the accession to the European Union² before the very accession. A positive attitude of the public was very important, because entering the European Union was decided upon by public referendum. Creating positive public opinion towards entering the European Union was analysed in detail by Tomić and Jugo (2011: 189-208) and they described the instruments the Republic of Croatia used in order to inform citizens and point them towards a positive attitude towards the European Union. Scientists also dealt with success

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¹ You can find more detailed information on the offers of these companies in the domain of public opinion research on their websites: http://www.target.hr/portal/component?option,com_frontpage/Itemid,1/lang,hr/, https://www.askgfk.hr/index.php?id=31&L=hr, http://www.pilar.hr/o-institutu/funkcionalni-centri/centar-za-istraivanje-javnoga-mnijenja-i-masovnih-medija, http://audeo.hr/hr_HR/ispitivanje-javnog-mnijenja, http://www.accent.hr/, https://www.markottel.hr/site/page/Istrazivanje-trzista-i-ispitivanje-javnog-mnijenja.aspx.

² This research was done in 9 cycles over the course of 3 years. The research results are publicly available at: http://www.mvep.hr/hr/hrvatska-i-europska-uniija/eu-za-gradane/istrazivanja-javnog-mnijenja/-.
Henjak analysed how much does the opinion of citizens towards the institutions and national political elites influence the relationship of Croatian citizens towards the EU (Henjak, 2017: 55-82), and he also performed an analysis of these opinions in the high school population. (Henjak, 2011: 126-156) The real power of citizens when deciding on “European affairs” was analysed by Miloš in his paper: Revolution that is not there: a direct participation of citizens in deciding on European affairs (hrv. Revolucija koje nema: izravno sudjelovanje građana u odlučivanju o europskim pitanjima). (Miloš, 2016: 133-163)

The existence of such research shows us that opinions of citizens on important state policies and regulations are very much taken into consideration. Apart from the European scene, citizens already decided on internal state regulation as well: in the year 2013, by public referendum, they decided on the constitutional definition of marriage. There was much discussion on the topic of to what extent citizens were informed when deciding on the definition of marriage, and to what extent were they manipulated. Đurin analysed the theme from the perspective of discourse theory (Đurin, 2017: 331-355), and Korać Graovac from a legal standpoint. (Korać Graovac, 2015: 799-811)

Shaping public opinion – citizen manipulation?

There are two possible ways in which public opinion can be shaped: the first is to shape it using media manipulation, and the other one is to develop a sense of social responsibility and a need of citizens to make informed decisions. There are frequent discussions on this topic from different points of view: from a psychological one (Ljubotina, 2017: 85-90) to the Christian one. (Ninčević, 2007: 131-148) How much can the media actually influence social responsibility and action is most apparent in crisis situations. (Plenković, 2015: 113-118) For example: during the catastrophic flooding in Slavonia in 2014, the social media played a major role in informing the public and coordinating the search and rescue services. (Kurečić and Kraljević, 2014: 175-186) Today, the way such communication is addressed in every day, and also crisis situations is a scientific and praxeological discipline from the area of communicology in which a major portion is taken up by questions of media ethics in the informing of the public and the possibility of the media forming public opinion. In regard to that, there is a special expression established for experts who shape the public opinion: spin doctors. (Knežević, 2006) The question of media and technic manipulation of public knowledge in the information society is not one with a recent origin date; as Boban and Vrbat point out: “History is filled with
examples of media misuse and using them to manipulate public knowledge, and in the contemporary globally networked society characterized by the omnipresence and availability of media, such actions can have dire consequences.” (Boban and Vrbat, 2016: 7) Because of this, experts have an obligation to inform the public in a timely and accurate manner, and it is the responsibility of the pedagogues to raise new generations into responsible citizens who can make informed decisions.

**Bioethics and GMO – (mis)informed citizens of the Republic of Croatia**

As Kelam pointed out: “In the discussion surrounding the technology of genetic modification, the role of the media in shaping public opinion has proven to be extremely important. The media are frequently the only source of informing and/or misinforming the public on the technology of genetic modifying.” (Kelam, 2015: 323) Kelam further states that: “What stands out the most in a good part of the media titles on GMO is a great propensity to myths and urban legends tied into the GMO problem. This trend was especially noticeable in the very beginnings of the controversy at the turn of the century, but it continued until today. The media, consciously or unconsciously, spread fear of GMO to the public with their shocking titles and texts where it was more important to make a strong impact on the consumer, even at the cost of the accuracy of the information brought to them.” (Kelam, 2015: 323) The initiative, in the sense of preventing the media to go public with pseudo-information, has existed in this area for decades. For example, as early as in 1994, the Technical Council of Great Britain issued a Code for Expert Practice titled *Engineers and the environment* (hrv. *Inženjeri i okoliš*). Runko Luttenberger highlights the role of experts in the process of informing the public on sustainable development and says: “The Code is of interest for engineers, owners, employers, directors, syndicates, governments, expert institutions, higher education institutions, schools, the public and mass (sic!) media.” (Runko Luttenberger, 1996: 181) Kufrin, in his presentation from the scientific conference *The courses and changes in opinions, the world, and man* (hrv. *Tijekovi i mijene mišljenja, svijeta i čovjeka*) talked about gene technology and the public in Croatia and concluded that a sociological research program “which would use survey research and a social-constructivist approach in a complementary way seems especially needed in Croatia, where the majority of actors who are trying to force their definition of gene technology in public arenas as the socially dominant are insufficiently aware of their own position, let alone the positions of other actors who are acting in the same arena or in comparative ones. The research of
opinions towards gene technology done on a student population in Croatia showed that even that population, partially even professionally informed of gene technology, is not particularly well informed on the problem. It can be expected that a research done on a general population would, in great part, instead of actual opinions, register randomized responses with a series of difficulties in interpreting such results.” (Kufrin, 2000: 215) From everything stated, we can conclude that the media did not adequately and competently inform Croatian citizens on the topics in the area of bioethics. Katunarić also pointed this out when he concluded:

The Croatian Constitution does not afford firm guarantees considering the protection of the environment and health, and neither does the accompanying legislation, probably because of fear of diverting foreign investors into the development of the country…there is a certain ecological sensitivity among Croatian citizens, although it is more on a local level (cities) but with a small percentage of engagement in environment protection agencies. In Croatia, as opposed to western EU countries, the public is not widely informed, nor has it responded to the dangers of the announced Transatlantic treaty (between the US and the EU). On the other hand, just like in the western countries, in Croatia the climate change does not cause greater concern (probably assuming it is a danger in the distant future). (Katunarić, 2017: 35)

We can conclude that real bioethical journalism, as defined by Sorta-Bilajac (2007: 179-194), still does not exist in our framework. From that perspective, the role of the pedagogues becomes even more significant.

**An informed citizen is developed from early childhood**

By the words of the authors of the handbook *Education for development* (hrv. *Odgoj za razvoj*): “The future of every society is determined by the present care for the young. Knowledge, skills, way of thinking and the values which children acquire during growing up affect not only the shaping of their lives as individuals, but also the development of the entire community they are taking part in.” (Miljević-Ridički, Maleš and Rijavec, 2001: 10) The responsibility of the pedagogues is even greater here because: “Bearing in mind the fact that today’s actions can influence the creation of a future we would want for our descendants, we need to act with education today on those who will create the world, the young, as future decision makers.” (Miljević-Ridički, Maleš and Rijavec, 2001: 10) We can conclude that today’s educators are preparing the young generations for a future they themselves do not know
what will look like, but positive pedagogic theories highlight that they have a goal of creating “a society of knowledge”\(^3\). In the *Teaching rights and liberties* (hrv. *Poučavati prava i slobode*) handbook, the role of education as a prerequisite for the realization of all other human rights is highlighted: “Recognizing education as one of the general and inalienable human rights and accepting the statement that it is key for the realization of all other rights necessarily brings us to a question of what education should be in order for it to be able to fulfil its complex task.” (Spajić-Vrkaš et al., 2004: 118) The first encounter with an institutionalized form of education is already in early childhood: with a child’s enrolment in kindergarten or preschool. Bašić, in her chapter *A new image of a child in the pedagogy of childhood* (hrv. *Nova slika djeteta u pedagogiji djetinjstva*) highlighted that the child is an active researcher of its environment, as well as the fact that there are different styles of learning of a child. (Bašić, 2011: 19-37) The need to raise active citizens from childhood is also recognized at the state level, as written on the official website of the Agency for Education: “Education for human rights and a democratic citizenry is systematically introduced into the Croatian educational system in 1999 with the decision of the Government of the Republic of Croatia relating to the application of the National Program of Education for Human Rights and Democratic Citizenship…Education for human rights and democratic civic education is programmatically united from the first to the fourth grade, within primary education. In subject classes, from the fifth to the eighth grade, there are two separate programs: the program of education for human rights and the program of civic education.” (http://www.azoo.hr). This curriculum assumes that a pupil, as a citizen of a class, school, and local community, will develop human rights, political, social, cultural, economic and ecological competences. A spiral development model of introduction by educational cycles is envisaged, starting from the 1\(^\text{st}\) grade of primary school. (Kurikulum građanskog odgoja i obrazovanja, 2012: 6) Spajić-Vrkaš and co. highlighted that “in 1999, there were four sub-programs published which were created by special task forces (for preschool, the first four grades, the higher grades of primary school, and for high school).” (Spajić-Vrkaš et al. 2014: 201) In the year 2010, the National Framework Curriculum for Preschool Education and General Mandatory and High School Education dealt with preschool education in two very brief chapters: 1. The purpose and importance of a preschool curriculum (NOK, 2010: 28) and 2. The structure of the preschool curriculum. (NOK, 2010: 28-29) The development of civic

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3 Different authors wrote about the term ‘a society of knowledge’ and the need for lifelong education: Jukić and Ringel (2013: 25-35), Račić (2013: 86-100), Letina (2015: 103-116) and Zado Bešker and Drilhač (2014: 33-37, 104).
competences is briefly described: “Values and opinions: acceptance, nurturing, and development of the values of family, community, and society.” (NOK: 29) A wider description can be found in the National Curriculum for Early and Preschool Education (NKPOO, 2014), and in the final Amendments of the Curriculum from 2016 (https://mzo.hr), a child is seen as an “active citizen”, and the role of the educator in shaping the curriculum is focused (among other things) on the “strengthening of the dispositions of children for a more careful observation of phenomena in their environment, research, conclusion, and responsible action” and, as one of the aims of preschool, the development of social and civic competences is highlighted. This document assumes the participants of this process as well: “In the construction, enforcement, and validation of the preschool curriculum, along with the educators, children and their parents, there are also expert co-operators taking part (pedagogist, psychologist, education rehabilitator, speech therapist, and social pedagogist) and the healthcare manager, as well as other experts brought in (from outside of the institution) with specific profiles.”

The echoes of this policy can also be found in practice: in 2017, conference proceedings titled Sustainable development and the educational system of Croatia (hrv. Održivi razvoj i odgojno obrazovni sustav Hrvatske) from the conference held in Zadar, in the organization by the University of Zadar and the “Radost” kindergarten in Zadar, were published. On that conference, the plenary speaker dr.sc. Vladimir Lay highlighted that one “should focus on fighting for sustainable living in contemporary technological, social, and globalization economic conditions strongly, smartly and with dedication. What our ancestors did for thousands of years, in which ever way, but still successfully, because we, the descendants, are still here. Education for sustainable development makes sense if it is focused on finding actionable and efficient solutions for sustainable living.” (Lay, 2017: 21) Diana Nenadić-Bilan, in her plenary speech stated that “sustainable development is promoted by way of formal, non-formal and informal education, and at the centre of attention there is the development of abilities, participation and self-determination for sustainable development” (Nenadić-Bilan, 2017: 48) and highlighted the importance of a holistic approach. The results of different research were also presented, and for the purpose of this paper we will only highlight the piece of data that says that “around 91,82% of examinees (note: examinees were students of the Faculty of Education at the University of Travnik and the Faculty of Social Science Dr. Milenko Brkić Međugorje) are of the opinion that education for sustainable development should have the contribution of all educational factors. From individual factors, we have the following, in order: school, work organizations, media, religious institutions, family, society and
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organization, and preschool institutions.” (Selimović, Selimović and Tomić, 2017: 304) It is encouraging that there are examples of good practice in this area: as many as 11 projects of kindergarten were presented which are part of the community of international Eco-schools, a project organized by the Lijepa Naša Association in cooperation with the Agency for Education (https://www.eko.lijepa-nasa.hr/). Unfortunately, only one report mentions the organization of creative workshops as a way of education, while the contents including performing arts are not mentioned. The report by Vesna Smojver explains this in the following way:

The choice of ecological activities is appropriate for the psycho-physical properties of the children of preschool age. The starting point in this choice are the children’s sensations and experiences, which the child processes through various forms of expression and creation. Every theme contains various activities. According to the Program focus, these are life-practical and various working games, social and social-entertainment, artistic, various expression and creation games, exploratory-cognitive, specific activities with movement. In the context of education for sustainable development, the life-practical activities, exploratory-cognitive ones and playing are more frequently encouraged, even though the rest are also present. (Smojver, 2017: 313)

Performing arts – the communicational frame in informing children

According to Popović, Popović and Bogut (2017: 674-675):

In the last few years, a lot of attention has been given to the so-called STEM system of education in the world. The goal of the STEM education program (Science, Technology, Engineering, Math) is to develop specific competences in pupils needed for advancement in the 21st century: critical thinking and problem thinking, creativity and innovativeness, entrepreneurship and similar. (Jolly, 2014) Instead of teaching the four stated disciplines as separate classes, STEM integrates them into a cohesive paradigm of learning based on practical applications. What separates STEM from the traditional subject education is the mixed environment for learning and the demonstration of the applied scientific method in everyday life. STEM methods teach students about computer

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4 The “Biokovsko zvonce” kindergarten mentions a creative and educational workshop they held “Using a linen bag to fight the plastic one” (hrv. Platnenom vrećicom protiv plastičnih), but this workshop was held as a part of cooperation with the parents. (Tomaš i sur, 2017: 388)
5 The authors specified performing arts because the reports frequently mention activities of making artistic and usage items from recycled materials, but such types of activities are not the subject of this discussion.
thinking and focus on the application of real life problem-solving. Recently, the idea of adding art into STEM programs has gained popularity, as a consequence of researching positive effects of doing various kinds of art on the development of children. That is how the new STEAM system of education was created (the added A stands for arts). (Kim et. al., 2012) Jolly (2014) highlights several ways in which art can be included: in design, performance arts (the author particularly highlighted acting and oratory skills), in creative planning. Music, even though its positive effects on child development have been proven many times over, is rarely mentioned.

Popović dealt more with the advantages of early music education of children. She points out:

There is evidence that shows that even relatively short periods of music education lead to deep consequences on the anatomical and functional organization of the brain in children, adults, even animals. The educational effects of music should not be neglected as well. Playing in ensembles teaches tolerance and respect of others. Successful teachers often listen to music or play music with pupils. Doing music helps with better socialization of children. Music connects children who otherwise would not discover they had something in common. That is a non-verbal means of communication and, therefore, in such communication there are no language barriers. Sharing love for a certain type of music connects almost automatically. Music can encourage children to sing along or dance, which promotes interaction with others. Parents are encouraged to sing to children even before birth because that creates a connection with the child in a very early phase of development. With regular practice of playing, small children improve their motor skills. The psychological effects should not be neglected, either: by playing music, children develop a positive awareness of themselves and gain confidence. The effects of music to our mood are well known, and children can use it as a means to express their feelings when they do not know how or cannot use their words to express them. (Popović, 2015: 572)

Dramatic art also has positive effects in raising children, and the information about the existence of dramatic pedagogy studies speaks to the affirmation of it. Even though Viola Spolin presented “theatre games”, which are the basis of the contemporary improvisation theatre of today, in the mid-20th century (Flegar (Nemet), 2014: 112), as Janković, Blažeka and Rambousek say: “The therapeutic and socialization possibilities of dramatic research are known and widely recognized today, especially in more developed western countries. During the last
decade, there has been a growing interest for the educational possibilities of drama work in Croatia as well. Lately, dramatic methods are more and more present even in those institutions (educational and rehabilitation) which are not tightly specialized for dramatic work with the children and the youth.” (Janković, Blažeka and Rambousek, 2000: 7) This is also confirmed by Gruić when defining the existence of an approach to the medium of drama education in the frame of which we can use drama techniques to deal with the widest range of content that school prescribed, from math to ethics. (Grujić, 2017: 25)

Therefore, education and informing using acting and music presents a perfect communication frame for various contents, and it could be considered ideal for multidisciplinary topics, which the area of bioethics most definitely is.

**Drama music workshop**

The dramatic approach to learning is a recognized learning method used in different situations, very frequently in the form of workshops. A detailed overview of methods and approaches was given by Kodrić in her review *Drama and theatrical approach to learning Croatian as a foreign language* (hrv. Dramsko-kazališni pristup učenju hrvatskoga kao stranoga jezika). (Kodrić, 2010: 9-31) In her professional paper *Drama workshops* (hrv. Dramske radionice) Trešćec Godek (2012) also speaks to the fact that the drama approach to education is already in application in Croatia. In it, the author describes teaching practice of the application of drama expression and brings forth a list of drama workshops in Croatia for, at the time, current 2012. Apart from schools, dramatic education is also used in preschool age, especially in the form of workshops, supported by the existence of the handbook *Drama play for preschool children* (hrv. Dramske igre za djecu predškolske dobi). (Perić, 2009)

Music workshops are explored in detailed on multiple occasions, and music games and workshops intended for children of preschool and early school age were a special subject of research for Jasna Šulentić Begić in her books *The application of an open model of teaching music in the first four grades of primary school* (hrv. Primjena otvorenog modela nastave glazbe u prva četiri razreda osnovne škole), *The methodical manual for teachers and students*

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6 The existence of professional and demonstrational papers is the witness of the increased interest for this area, such as a useful manual for improvisation published in 2016: *Theatre improvisation, language and communication: a manual for professionals, instructors, teachers, students, and enthusiasts* (hrv. Kazališna improvizacija, jezik i komunikacija: priručnik za profesionalce, nastavnike, učitelje, studente i entuzijaste). (Flegar Nemet, 2016)
of primary education, music culture, and music pedagogy (hrv. Metodički priručnik za učitelje
i studente primarnog obrazovanja, glazbene kulture i glazbene pedagogije) (Šulentić-Begić,
2016) and the Open model of music class in primary school practice – listening to music and
singing) (hrv. Otvoreni model glazbene nastave u praksi osnovne škole Slušanje glazbe i pjevanje).
The methodical manual for teachers and students of music culture, music pedagogy and primary
education (hrv. Metodički priručnik za učitelje i studente glazbene kulture, glazbene pedagogije
i primarnog obrazovanja). (Šulentić-Begić, 2012) In the paper titled Musical activities in the
framework of non-musical subjects in the first three grades of primary school (hrv. Glazbene
aktivnosti u okviru neglazbenih predmeta u prva tri razreda osnovne škole) (Šulentić-Begić and
Špoljarić, 2011: 447-462), she described the purpose of music in processing non-musical
contents and stated practical examples.

Combining dramatic and music elements into a single workshop, therefore, seems to be
logical. Dramatic and music elements are combined into a whole through play and story7 in a
way that children have an opportunity to learn in an enriched environment8 (music) and in an
empiric way (dramatic expression), which is especially appropriate for children of preschool
age. The aim of practical realization of the workshop was to verify the aforementioned
theoretical assumptions.

Workshop realization

The workshop was realized on the occasion of the First Osijek Days of Bioethics
conference, where the intention, structure and the results of the workshop were presented by
way of a poster presentation. The target group was the oldest group of children from the
“Radost” kindergarten. The place of realization was the playroom of the City and University
Library Osijek, and it was led by Mira Perić9 and Ana Popović10. The practical aim of the drama

7 Slunjski and Ljubetić (2014: 127-141) wrote on the importance of play in the education of preschool children,
and Bogut, Junušić and Majdenić (2016: 241-248) wrote on the importance of stories, especially Narančić Kovač
in her monograph One story – two narrators: a picture book as a story (hrv. Jedna priča – dva pripovjedača: slicovnica kao pripovijed) (2015).
8 Velički and Topolovčan (2017: 74-114) wrote about the influence of an enriched environment on the ability to
learn.
9 Prof. Mira Perić, Faculty of Education, teaches the following classes: Dramatic education, Dramatic games,
Puppetry, and Puppetry games, and her scientific profile is available at: https://scholar.google.hr/citations?user=ENmh7wAAAAJ&hl=en.
10 Ana Popović teaches the Music playing class at the Faculty of Education, and her scientific profile is available
at: https://scholar.google.hr/citations?user=Dzem6n0AAAAJ&hl=hr.
music workshop was to present to children the problem of producing food and healthy nutrition through play. The story used in the workshop was from a picture book *Niko and nutrition.* (Cabrera, 2015) The book offers us an instructive story about Niko, an imaginary forest hero who, on his own (negative) example, learns about the basics of healthy dietary habits. Apart from the story, the picture book also gives separately explained terms related to healthy nutrition. The workshop was realized in four parts.

The first part started with a physical and musical warmup. The children moved freely in space and performed breathing exercises, as well as singing exercises. Together they performed a song *A ram sam sam* with *body percussion* elements. After the level of energy and motivation was raised to a desired level, the second phase was approached: presenting the theme of nutrition and processing the picture book story. The story was not just read. In a given context, the children played out certain parts of the story, with tone painting. Considering the workshop was of an open type, the character of a boy called Filip spontaneously appeared, who is not even mentioned in the picture book story. In the third part of the workshop, the attention was turned to the children’s experiences in the processes of growing food and nutrition. The children formed personal opinions on the problem of producing food and healthy nutrition, and they even talked to the guest-expert for that area for information, Ivica Kelam. The children spent the final part of the workshop singing songs and dancing, after which they spent another portion of the time in free play.

After the workshop, children spent a little while longer in the area of the playroom in the library and the managers noticed that children reached for food and nutrition related toys during play and “played out” situations from the workshop amongst themselves. Such an immediate reaction by children on the activity they just witnessed points to a successful implementation of the awareness of the importance of proper nutrition and the understanding of the process of getting food. Therefore, we can conclude that the workshop was successful.

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11 Why we need fish and walnuts in our nutrition, what salt and calcium do etc.
12 Popović, Popović and Bogut (2017: 677-678) and Popović (2017: 338) wrote about the application of the body percussion methods and the positive influence on the development of motor and cognitive functions of the brain for pedagogic purposes.
13 The description and way of application of drama techniques used here is well described in the manual for performing the process drama by the author Iva Gruć (2002).
14 Asst. prof. Ivica Kelam teaches the following classes at the Faculty of Education: Bioethics, Philosophy, Ethics, Ecology, Social Ecology, Sociology, and Politics. His scientific profile as available at: https://scholar.google.hr/citations?user=uE1qaIEAAAAJ&hl=hr.
15 The authors performed a workshop of a similar model on the topic of environment protection as well, on the occasion of 6th symposium with international participation *Kopački rit jućer, danas, sutra* (eng. *Kopački rit jućer, danas, sutra*).
Conclusion

In today’s society, public opinion plays a major role in creating different legislative measures and regulations, as well as those related to the area of bioethics. Because of that, experts have an obligation of a timely and accurate informing of the public, and pedagogues have a responsibility to raise new generations into responsible citizens who can make informed decisions. Civic education is also the subject of the National Curriculum for Early and Preschool Education, which assumes the development of social and civic competences. The problems of bioethics and the environment are still insufficiently transparent in the public. Therefore, proper ecological education from a preschool age is very important.

Contemporary pedagogy highlights the importance of proper learning and the benefits of learning through play. Performing arts are recognized as useful in the process of learning from the earliest age and are forced as an ideal framework in which we can place various contents. A drama music workshop that develops an awareness of ecology and bioethical problems in children, therefore, represents an ideal training ground for education of a responsible and informed citizen. An example of such a workshop is one that was held on the occasion of the First Osijek Days of Bioethics and it was based on a story from the picture book by Aleix Cabrera and Rose M. Curto: Niko and nutrition. The story helped to highlight the importance of proper nutrition to children, as well as the need to know what exactly it is that they are eating and where food comes from and how. Such workshops are important in early and preschool education of children because they respond adequately to a need to create informed and responsible citizens who will play a major role in shaping legislation regarding the sensitive and important area of bioethics in the future.

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**BIOETIKA U BUDUĆNOSTI: EKOLOŠKI ODGOJ OD PREDŠKOLJSKE DOBI. DRAMSKO GLAZBENA RADIONICA KAO PRIMJER**

**Sažetak**

U današnjem društvu javno mnijenje igra veliku ulogu u donošenju različitih zakonskih mjera i regulativa, pa tako i onih vezanih za područje bioetike. Zbog toga stručnjaci imaju obavezu pravovremenog i točnog informiranja javnosti, a na pedagozima je da odgoje novu generaciju kako bi postali odgovorni građani koji mogu donositi informirane odluke. U školstvu se prije par godina pokušao provesti projekt zdravstvenog odgoja, a zatim i građanskog odgoja i obrazovanja. Tim kurikulumom predviđeno je da učenik kao građanin razredne, školske i lokalne zajednice razvije ljudskopratne, političke, društvene, kulturne, gospodarske i ekološke kompetencije. Predviđen je spiralno-razvojni model uvodenja po obrazovnim ciklusima, počevši od 1. razreda osnovne škole. No, građanskim odgojem ipak se bavi i nacionalni kurikulum za rani i predškolski odgoj koji predviđa razvoj socijalnih i građanskih kompetencija u djece rane i predškolske dobi. Problematika bioetike i okoliša još je uvijek nedovoljno transparentna u javnosti. Zbog toga je pravilan ekološki odgoj od predškolske dobi vrlo važan. Pri odgoju i obrazovanju u predškolskoj dobi bitan je pravilan pristup, a suvremena pedagogija naglašava važnost učenja kroz igru. Umjetnička područja nameću se kao idealan okvir u koji možemo smjestiti različite sadržaje. Dramsko glazbena radionica kojom će se djeci kroz igru razviti svijest o različitim problematikama predstavlja stoga idealan poligon za odgoj i obrazovanje odgovornog i informiranog građanina. Za potrebe demonstracije povodom Prvih osječkih dana bioetike organizirana je jedna takva dramsko glazbena radionica. Priča koja se...
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koristila u radionici je iz slikovnice Aleix Cabrere i Rose M. Curto: Niko i prehrana. Njome se kroz igru i priču djeci naglasilo važnost pravilne prehrane i osvijestilo potrebu za time da znaju što zapravo jedu te odakle i na koji način dolazi hrana. Ovaj rad koristi održanu radionicu kao polaznu točku pri diskusiji o ulozi umjetničkih područja i pedagoga u stvaranju odgovornog i informiranog građanina u temama bioetike i zaštite okoliša te važnosti ranog i predškolskog odgoja u tom procesu.

Ključne riječi: oblikovanje javnog mnijenja, građanski odgoj, dramske igre, glazbene igre, dramsko-glazbena radionica, bioetika