Abstract: Traditional children’s games represent an important area within pedagogical culture and tradition of every ethnic group. The opportunities for popularisation of traditional children’s games in contemporary educational systems through information-communication technology are elaborated in this paper. In doing so, two main aims of this process are emphasised. The first aim is related to opportunities of digitalisation and virtualisation of various traditional children’s games into educational computer programs and applications. The second aim, without which the first would not be sufficient, is related to motivating and encouraging children for “transmission” of traditional games from virtual world into real life. It would include different children’s activities, after introducing traditional games through specially created computer programs, making of real props and organisation of these games in the real world, in a natural environment within free activities in school and some subjects such as: Physical Education, History, Nature and Society, Practical and Handicrafts.

Keywords: traditional children’s games, toys, information-communication technology, contemporary education.

“The persistence of games is remarkable. Empires and institutions may disappear, but games survive with the same rules and sometimes even the same paraphernalia. The chief reason is that they are not important and possess the permanence of the insignificant. Herein lies a major mystery. For in order to benefit from this kind of fluid and yet obstinate continuity, they must be like the leaves on the trees which survive from one season to the next and remain identical. Games must be ever similar to animal skins, the design on butterfly wings, and the spiral curves of shell fish which are transmitted unchanged from generation to generation. However, games do not have this hereditary sameness. They are innumerable and changeable. They are clad in thousands of unequally distributed shapes, just as vegetable species are, but infinitely more adaptable, spreading and acclimating themselves with disconcerting ease. Their diffusion does not remain determinate for very long”

(Caillois, 2001, p. 81).
The game is a natural human activity. Eugen Fink (1979) considered a game in the context of the basic phenomena of human existence. The game is, therefore, the human activity in general not related to some purpose. “Where the individual develops from personal internal initiative without external compulsion and coercion, where with no external objective a personality is confirmed and manifested, strengthened and developed; there we are dealing with real beginnings of the appearance and playing games” (Slatina, 2005, p. 265). The basic functions of the game and playing run various instinctive actions that originate from different systems of behaviour, that is the launch of a special motivational natural resource, development and maintenance of natural activity and curiosity and excitation of a sense of beauty.

The phenomenon of the game is the focus of various experts in the field of anthropology, pedagogy, sociology, psychology, kinesiology, but in modern times also experts in the field of information-communication sciences whose effect is particularly marked in the field of edutainment, gamification of education, and the use of games, information-communication technology (ICT) and other innovations in teaching and learning. In the process of gamification of the modern educational process one should take into account the essence of the phenomenon of the game and its essential characteristic of sense of ownership in itself and not something out of it. This is important because it plays a “fundamental option of creativity and form of human unity which presupposes and requires individual freedom. The game is a form of creative existence” (Životić, 1986, p. 227). In this regard, the following will try to explain the idea of the use of modern information and communication technologies in the process of popularisation of traditional children’s games in everyday life and education of modern generations of children and young people.

The purpose of this paper is actually an explanation and pedagogical argumentation of this idea. There will not be detailed explanations and vocational-technical instructions regarding the use of appropriate programs and tools in the field of information-communication technology made in relation to the development of computer and other electronic versions of traditional children’s games, because it would exceed the terms and purpose of this work. Of course, these explanations and instructions and the very creation of electronic games are an area of professional activity of experts in the field of information-communication technology. Here, then, we want to emphasise primarily pedagogical features of traditional children’s games and the importance of introducing them to modern children through technology that surrounds and follows them in their everyday life.

1 The complexity and difficulty defining the term game (“play-concept”), as well as semantic and etymological determinants of the term in different languages of the world in more detail see in Huizinga, 1980, pp. 28-45. Here we will mention one of the definitions of games that Huizinga gives in the mentioned section in the chapter Nature and Significance of Play as a Cultural Phenomenon: “Summing up the formal characteristics of play we might call it a free activity standing quite consciously outside »ordinary« life as being »not serious«, but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings which tend to surround themselves with secrecy and to stress their difference from the common world by disguise or other means” (p. 13).
AN ETHNOPEDAGOGICAL EXPLANATION OF TRADITIONAL CHILDREN’S GAMES

Traditional children’s games represent an important area within pedagogical culture and tradition of every ethnic group. The game itself is a special cultural phenomenon. The relationship between culture and game is visible throughout the history of human kind. The game is one of basic factors of traditional folk upbringing (Volkov, 1999, Volkov, 2004; Tufekčić, 2012). It always represented the area of specific connection between the development of the child’s personality and the natural environment. Through game, in the classic sense of the word, a symbiosis between these two natures realises itself: the “external” that represents the space for life, work, play and the “internal” specific human nature that, from within the flow of growth and development, implemented and achieved in landscapes of the first one. One should, therefore, agree with Volkov (Волков, Г. Н.) that the game is a sort of a miracle that a man develops in harmony with nature. Traditional children’s games had a huge educational impact because different activities of children and youth permeated through them. Thus, it is emphasised in ethnopedagogy that games can be considered a sort of “realised fairy tales” (Volkov, 1999; Tufekčić, 2010; Tufekčić, 2012). In tradition of all peoples, the importance of games and playing for development of children are emphasised. One Azeri proverb: “Do not grow a child of food, but of joy” (Volkov, 1999; Tufekčić, 2010; Tufekčić, 2012). The importance of game, thus, is placed at the level of child’s basic existential needs such as, e.g. food.

Since the traditional children’s games manifest creative (wit, imagination, ingenuity, creativity, etc.) and expressive (agility, skill, dexterity, etc.) character, their role in the development of different spheres of the child’s personality is great, and in certain ways irreplaceable. Thanks to these games children come to know themselves and their environment gradually, step by step, revealing an area of activity, art and beauty in the broadest sense of the word. Therefore, traditional games were the most important content that filled the space of children’s subcultures. In particular, one can point out their importance for the development of self-education and mutual education of young generations. Children’s games in the traditional culture were important area of education and socialisation that were realised through the development of autonomy, creativity, freedom, responsibility, spontaneity and activity. Through these, children developed their own and for children’s subcultures specific “moral code” that was not primarily imposed by adults, unlike many modern games that are designed by adults, where the structure, rules and all other characteristics of the primary, and often exclusively, are resulting images of the world that adults have rather than children (Volkov, 1999; Tufekčić, 2010; Tufekčić, 2012).

The world of game and play was a sort of subcultural space and authentic life area and

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2 Friedrich Schiller was one of the first who emphasised the importance of game for culture. In Letters on Aesthetic Education of a Man he says: “Once and for all finally a man plays only where he is a man in a full sense of the word, a complete is a man only where he plays” (Schiller, 1967, according to Životić, 1986, p. 226). See also in: Holmes, 2013. Also, on the significance of a child’s game in general as well as on the development of children’s games through the history of human kind see in: Brehony, 2004.

3 In modern society we will often hear that representatives of the senior generation, grandfathers and grandmothers, having rich life experience, warn strict parents not to forbid children to play. We can often hear young parents that they are not satisfied with the fact that their parents (grandparents) are too “indulgent” towards their children and that they did not allow many things to them that they now allow to their grandchildren.
as such was primarily a creation of children and youth. Adults set “external” borders and limitations of this area, but without direct interference in a sense of artificial creation and change of the world of childhood and youth according to adults’ measures, as can be seen in modern times (Tufekčić, 2012). During the process children were specific innovators because games encouraged development of intellect, emotion and will but also stimulated creative activities and amateurism. All of this is emphasised in the traditional toys themselves. In their purpose, significance and method of development children met with adults but not as a mere “consumers” of what the world of adults comes up with but as active creators. Through traditional children’s games and toys they connected the world of childhood and the world of adults but also the childhood of human kind and modernity (Volkov, 1999, Tufekčić, 2010, Tufekčić, 2012). The most significant characteristic of traditional children’s toys is that children made them on their own, or with the help of adults that, most of all, reflected in the support of development of active characteristics of will and character of a child, and from different materials from their own environment (wood, soil, stone, water, plants and other handy materials from everyday life). In that child’s activity, creativity and spontaneity developed in a natural way. The workmanship of toys and play equipment was fulfilled with different intellectual and manual activities but the very playing itself represented a wide range of different forms of children’s activities because it was developed with movement (running, walking, crawling, jumping), song, dance, different body movements (clapping, swinging arms, stretching, bending), as well as fairy tales, local legends, sayings, riddles, tongue twisters, and therefore verbally expressive activities such as recitation, acting, imitation of various sounds and voices from nature. Traditional children’s games in this manner, were an unintentional, natural life school through which children developed relationships towards themselves, their peers, older children and adults, as well as towards the concrete and real natural and social surroundings. Characteristics of genuine education, such as naturalness and integrity, developed through these (Volkov, 1999, Tufekčić, 2010, Tufekčić, 2012).

In the process of the game the children were involved in the early self-education that has no pre-determined goals because it was spontaneous since natural game has a purpose in itself. If we can talk about some of the goals of the game, then we can say that they grow, are defined in the very process of the game, with its essence and are connected and are fully in line with the capabilities, performance and achievements of the child. The games originated from the child’s authentic life and its values, and in this sense are also significant because according to them one could try and judge personality, character, interests, aptitudes, abilities and attitudes of a man (Volkov, 2004, Tufekčić, 2010, Tufekčić, 2012). It is believed that even Plato emphasised the following “You can discover more about a person in an hour of a game than in a year of conversation”.

Modern pedagogical science should always evaluate and analyze the role of traditional children’s games with the aim of their participation in the upbringing-educational process at school, especially if one takes into account the large number of disorders in the development of children and even some physiological and psychological diseases that are directly or indirectly linked to the increasing lack of direct contact with other children, decreased physical (bodily) mobility of children and also very present so-called “sedentary culture of life” from the earliest age (Tufekčić, 2010, Tufekčić, 2012). Basic provisions of popularising traditional children’s games in the modern educational system through the information-communication technology are explained below. In doing so, two main aims of this process are emphasised.
POPULARISATION OF TRADITIONAL CHILDREN’S GAMES VIA ICT

Traditional children’s games disappeared from the life of a modern child at large and today are unknown to children. They are not part of the everyday natural environment of a modern child any longer. One can even talk about disappearance of a large number of elements of children’s sub-cultures in connection with games and playing that traditionally shaped the world of childhood and youth. Here it should be emphasised the most important characteristic of traditional children’s and youth’s sub-cultures – there was no total control over children’s and youngsters’ activities by adults, and the existing limitations were not directly manifested and in some way were semiotic and stood outside of borders of interpersonal relations into a sphere of general culture (Burykin, 2004, according to Tufekčić, 2012). As stated before, children created games, toys and rules on their own at large, and also, independently solved possible “misunderstandings” and “conflicts” in the game without any major interference from adults. The absence of interference of adults is reflected in the impossibility of reducing the game and playing exclusively in a teleological context. Spaces and colours of games that children were creating on their own can be found in the original acts of human nature, such as natural feeling for education, natural openness to the world, a natural acumen and curiosity, natural curiosity, a natural activity and the like. In contemporary society the “patchwork” of these colouring games becomes invisible for children both in physical (appearance) and the spiritual sense.

At the same time, a specific form of colonisation of childhood’s and youth’s space is visible. Adults “conquer” bigger areas in children’s sub-cultures. Many sociologists of childhood warn that this could lead to “disappearance” of childhood. The unusual and strange process of accelerated “push” of children into the world of adults is at a stage in a way that contents and forms of children’s experiences in the modern society come from the adults’ visions. In this way children are increasingly running out of primary experiences, i.e. “the first-hand experiences”, while the number of secondary and tertiary experiences is growing rapidly. Children and young people are increasingly faced with processed and pre-interpreted experiences. Facilities for children of primary notions of the world, in modern times, are almost completely pre-formed and as such actively prevent “confrontation” with the child’s reality (Gudjons, 2012). Therefore, these activities can be considered “depleted” with respect to the well-known importance of the child’s own activity in the development of his personality. Such depletion facilities cannot fully meet the wealth, mobility and liveliness of child’s nature as a human being in development. They cannot be the content of upbringing and education that are consistent with human nature and that have also an anthropocentric character. They can neither confirm nor develop individual life forces of the child and his specific human characteristics. They also distort and damage the internal independence of the child.

On the other hand, while the world of adults increasingly occupies the world of childhood, the appearance of infantilisation of the world of adults is also evident. Many activities that are formally connected to childhood and youth are too often dominant in the world of adults. This certainly applies to the area of games and playing. Many contemporary games, and even toys are becoming “more interesting” to adults than to children. The question that imposes itself is whether the reason for this is that those games and toys are mostly the product and creation of adults and that they are more suitable to them regardless of the fact that they are formally intended for children. This colonisation...
of childhood, thus, reflects in the fact that games and toys of contemporary children are mostly designed and made by adults. In that way, games and playing become part of mass industrial production and thus more affected by the so-called mass culture and in that way separated from a child’s authentic life. Some philosophers and anthropologists have even warned of the deleterious effects of mass culture for the game itself and its essence. In addition to this, a large part of the so-called “world of game” has been moved from the real into virtual space and the space of hyperreality. Possibilities that in that field, through some of its characteristics such as disintermediation, prosumation and momentariness, gives us information-communication technology are really great and keep expanding. The modern era is also marked by a large number of most diverse and constantly produced computer (PC) games that have become part of the lives of children and adults as well. They are also largely created by adults who have their own vision of those games. Regarding this, we must not lose sight of the fact that adults do not understand a game from a child’s point of view, but from their own. This represents an inexhaustible source for many recent scientific analyses and daily discussions aimed at bringing benefits, disadvantages, consequences and influences that these games have on the development and education of children and young people. We will not discuss advantages and disadvantages here, but our intention is to observe information-communication technology and computer games in the context of their usage for introduction of children and young people with forms of games and playthings that disappeared from everyday life. Namely, information-communication technology, computer, “smart phones” and other devices are an integral part of immediate life environment of children who are in daily contact with them.

However, many contents that occur in processes of reality “production” by adults and that are mediated to a child through this technology belong to the virtual world and are sorts of simulacrums, e.g. illusion of playing football through display and keyboard or touch-screen.

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5 As if our own children sometimes, even in infancy, face us with this fact. In fact, often as parents we are very surprised that the children instead of playing with toys, which we purchased for them in various toy stores and we buried the children’s rooms and other spaces for the game, rather choose a plastic bag at the supermarket or other slippery subject, a pot from the kitchen at which one can bang, ordinary cardboard box or any other “ordinary” matter that for us adults do not even look like toys. It appears that many “interesting” characteristics of the mass produced toys (which with the help of the battery can sing, cry, move, “pronounce mom, dad”, laugh, make sounds and light, i.e. be as nearly as “right as human or animal beings” or “right things”) often cannot attract children’s attention as rustle of nylon bags can, the sound of pots on which she/he freely attacks or hides in a cardboard box which in their imagination becomes a house, a boat, cave, plane, car, rocket, etc.

6 Here is one such thinking: “As leisure, sandwiched by world ruled norms of domination over man, game is being lost more and more. The modern mass culture destroys every game. The mass culture is created according to the standards of mass industrial production and expanding mass communication to meet the needs of mass society (...) in which there is no possibility of developing individual personal qualities, but there are only general, typical, standard features ... The mass culture is a culture that by means of modern industry produces values such as a commodity available to everyone ... In the mass culture prevail values of the dominant ideology ... The mass culture exists to abolish the contradiction between ideology and personal consciousness ... This is why the mass culture is dangerous for every game” (Životić, 1986, pp. 230-233).
as a replacement for real playing football on the real grass field. Thus, a constant tendency that something can be and is a true part of the real world transformed into simulacrum and as such is presented to a child as a life reality. Surely, virtualisation of playing football, as stated as an example, does not prevent real playing of football because children can immediately see and experience this game in their real surrounding. But, what happens with those children’s games, such as traditional children’s games, that are no longer present in the real world and were present some time ago? We have already stated that creation of computer games often entails conversion of real into simulacrum. But, things in this field can be designed differently in, tentatively, different directions. We believe that information-communication technology can be a very good device for children to be presented with games and toys that they can no longer see in every day life in a virtual form which would further develop their interest and motivation for their playing in the real world. Since children themselves made traditional games and toys, the introduction of traditional games in lives of modern children would actually be introduction of something that had been created exclusively by children in the past. In that way children would be mediated with contents made in a children's, and not in an adults world.

Due to all the aforementioned, here we want to open reflections about the input of traditional games and toys into the world of the modern child through information-communication technology. In order to avoid unnecessary elements of aforementioned colonisation of childhood, the virtualisation of the traditional games offers, through a virtualised and a world created by adults, something that children formerly created in their own way. In this regard, information-communication technology appears as an important means for gathering information and knowledge about traditional children’s games. This idea goes into the direction of finding the opportunities for popularisation of traditional children's games in the contemporary educational system through information-communication technology. In doing so, two main aims of this process are emphasised. The first aim is related to opportunities of digitalisation and virtualisation of various traditional children’s games into educational computer programs and applications. Firstly, we must think about ways to introduce structures, shapes and appearances, game modes and props of various traditional games through computers to children in class, since children cannot see traditional children’s games in their natural environment in the contemporary society. The second aim, without which the first would not be sufficient, is related to motivating and encouraging children for “transmission” of traditional games from virtual world into real life. Thus, in the sense of organisation, the popularisation of traditional children’s games would develop into three phases as presented below (Fig. 2).
The first phase would present a field ethnopedagogical work with the aim of collecting data on names of traditional games, methods of playing, toys, devices and their design. This data would be processed and virtual examples of these games in a form of modern computer games would be made. Children and young people could be included into research teams, and with expert guidance they could collect data on games originating from places where their schools are situated. Following this, we would show drawings which were created during the research of traditional children’s games from the first half of the XX century within the area of North-eastern Bosnia.

The second phase would comprise making of computer games on the basics of the collected data about traditional games. So, children would be in touch with traditional games through various, specially made computer games and IC applications. In this phase especially important is the role played and cooperation and mutual interdisciplinary work of experts in pedagogy, psychology, ethnopedagogy, information-communication sciences. Also, children and young people could take part in this phase. Through curricula of informatics in schools children could with adequate guidance make special computer games and other applications on their own and their basic content would be traditional children’s games.

The third phase should be playing these games in real world. It would include different children’s activities, after introducing traditional games through

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1ST PHASE
The study of traditional children’s games within ethno-pedagogy and pedagogical anthropology.

2ND PHASE
The virtualisation and computerisation of traditional children’s games; The introduction of games through ICT.

3RD PHASE
The transmission of games from the virtual world into the real world; The process of making toys and props; The inclusion in the school curriculum.

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The basic explanation of the methodology of ethnopedagogical field research and a number of drawings and descriptions of traditional children’s games in the first half of the 20th century that were created in the course of extensive research ethnopedagogical aspects of growing up and raising in the traditional Bosnian society in northeastern Bosnia see in Tufekčić, A. (2012). In addition, for understanding of methodological assumptions for research of games as socio-cultural, philosophical and pedagogical phenomenon and the importance of proper collection and description of traditional children’s games through field work is very inspiring and useful consider the following works: Reprintceva, 2006; 2011, Reprintceva, Gorokhovskaya, Ilinskaya, Lakhin, & Tikhonova, 2011.
specially created computer programs, making of real props and organisation of these games in the real world, in a natural environment within free activities in school and some subjects such as Physical Education, History, Nature and Society, Practical and Handwork. In this way traditional children’s games would become a part of school curriculum.

These three phases are, actually, ways for “mediatisation” of the traditional children’s games and the “pedagogisation” of the information-communication technology. The essence of this process is instead of permanent ascertained and opposing highlighting of advantages/usage on the one hand, and disadvantages/mischievousness of modern information-communication technology for the development of child’s personality on the other hand, focus attention in the process of pedagogisation of this technology. It is important because information-communication technology represents civilisational accomplishment and as such is regularly present during the process of growing-up, shaping of elements of will and character, socialisation, learning about the world and education of modern generations of children (more in Semonov, Pereverzev, & Bulin-Sokolova, 2005, Wastiua, Kearney, & Van den Berghe, 2009). In other words, youngsters should learn that modern technology is a device that they as creative creatures use in the process of game, learning and realisation of their creative needs and activities and not to be “governed” or “owned” by technology. Otherwise, the difference in understanding modern technology between children and youngsters would develop and deepen.

All this points to the fact that all our thinking about games and gamification of education cannot be reduced to the study of the funds for game and ways to use them. The game is much more than just playing techniques or forms of toys. Games and game modes are in their various forms products of different cultures but once Huizinga...

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*“The results of most studies on the use of computers and the Internet by children and young people, among other things, show a clear discrepancy in the understanding of computer technology between parents and children. Parents perceive computers and the Internet as an important aid in the education of their children as well as a special link between school and home, while children see computers and the Internet more for entertainment, playing games, hanging out with friends and making space policy beyond the control of parents (Kerawalla, & Crook, 2002). The sense of the potential and the future in general in children are slow to develop which, among other things, leads to understanding of computers primarily as resources, tools for the game, not for education. »Children’s horizons are oriented more towards the present than the future« (Holloway, & Valentine, 2003, p. 156)”, quoted according to: Nikodem, Kudek Mirošević, & Bunjevac Nikodem, 2014, p. 213.*
(1980) emphasised, on the first view, opposite belief that culture is the one that arises from the games (see in: Caillois, 2001, pp. 57-67).

Additional dimensions of the idea of popularising traditional children’s games through the information-communication technology is the fact that in this way, children could get to know not only traditional games within their own culture, but traditional and children’s games from various cultures around the World. We believe that this has its own significance in the context of intercultural education. In this sense, one can talk about the possibilities of a specific contact and the permeation of the elements of traditional culture related to the game and play, and thus on life in total of members of different cultures around the world through virtual and real spaces. This is one way of learning not only about one’s own culture but also about other different cultures that make up the totality of humanity. In today’s world full of conflicts, prejudice, stereotypes, this is one of the existential human needs and tasks.

A BRIEF OVERVIEW

The idea of popularising traditional children’s games through the information-communication technology is based on the intention of an intertwining of tradition and modernity. The purpose of this permeation is to preserve the essential characteristics of the game as one of the fundamental human existentials. The game as a phenomenon that is immanent to human nature has its own substance that is universal and unchanging at all times while the forms and means of the game can be changed. Information-communication technology in this context can be a very important source of information but also motivation and initiation of activity and leisure activities of children and youth. This includes not only the process of transforming the real games in the virtual game, but also the process by which virtualisation of almost forgotten games encourages playing these games in the real world thus reactivating spontaneity, freedom, responsibility, independence, activity, contemporary reality, initiative, creativity, primary and secondary socialisation and thus the formation of personality on grounds of own activity and primary experiences. Note the following words of the writer Khalil Gibran from A Handful of Sand on the Shore: “Progress lies not in enhancing what is, but in advancing toward what will be” (Fiala, 2006, p. 127).

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REFERENCES

• Fink, E. (1979). *Grundphänomene das menschlichen Daseins* [The Basic Phenomena of Human Existence]. Freiburg/München: Verlag Karl Alber GmbH.