# Pro Edu. International Journal of Educational Sciences

PEIJES

IFIASA

# TABLE OF CONTENTS

# Preface

The fourth issue of *Pro Edu. The International Journal of Education Sciences* (January 2021) presents a series of scientific and theoretical articles, dedicated especially to the situations faced by education during the pandemic situation.

The first study included in this volume is suggestively titled: CAN JULIEN D'HUY'S COSMOGONIES SAVE US FROM YUVAL NOAH HARARI? The author, Prof. Ph.D. Jacques COULARDEAU, from Université Paris 1 Panthéon-Sorbonne, invites us, through his study, to enter the work of Julien d'Huy, in order to find the power and energy that will allow us to avoid the nightmare of humanity, foreshadowed by Yuval.

The next study, PERCEIVED BENEFITS OF ONLINE LECTURES DURING THE PANDEMIC: A CASE STUDY IN ENGINEERING EDUCATION, belongs to Valentina Iuliana MANEA, Tudor MACAVEI, and Costin PRIBEANU. Starting from the idea that the educational process has changed itself significantly in the context of the pandemic generated by the Sars-Cov-2 virus, the authors set as objectives of this research to analyze the advantages of online lectures, as perceived by the students from the Technical University of Building Engineering, Bucharest.

The third study, entitled IMPACT OF THE COVID-19 PANDEMIC ON EDUCATION AND TRAINING was written by Anamaria BURADA. In this context, she makes a predominantly theoretical presentation of how the Covid-19 pandemic affected all areas of education in 2020, at all types and levels, from early to adult education, as well as the reaction of European countries and institutions, through specific adopted educational policies.

In the context of the study named ONLINE EDUCATION - PROBLEMS AND SOLUTIONS, its authors: Cristina Veronica ANDREESCU, Adina NICHITA, Dumitru ENACHE, and Bianca MIHAILOVICI aim to address a topical issue, linked to e-learning platforms. In this article, the authors present several features of the online educational platforms that serve distance learning, adopted during the pandemic period by the majority of states, with the view to continue the educational process, at all levels of learning.

The following study, TIKTOK - THE INFLUENCE ON SCHOOL PERFORMANCE AND SOCIAL LIFE OF ADOLESCENTS, written by Adina NICHITA, Dumitru ENACHE, and Cristina Veronica ANDREESCU, introduces issues related to TIKTOK app. The authors aim to analyze the advantages and disadvantages of using this application in the educational environment.

The next study belongs to Sudhakar VENUKAPALLI, from University Hyderabad, India, being entitled POLICE TRAINING TO POLICE EDUCATION: A PARADIGM SHIFT IN POLICE CURRICULUM. This study aims at identifying general curricular parameters, related to the development of the culture of policing, making policing practices more democratic and public-oriented, able to ensure greater security and more effective crime prevention.

In the end, Lect.Ph.D. Elena-Ancuța SANTI made a review of the book EDUCAȚIA DIGITALĂ [DIGITAL EDUCATION] - coordinators: Ciprian Ceobanu, Constantin Cucoș, Olimpius Istrate, Ion-Ovidiu Pânișoară. The book is considered a work of extreme importance for the field of pedagogical literature, mostly in this time, when the Romanian school is passing through the global pandemic context and is trying to identify the most efficient solutions to continue the teaching process and to achieve it at higher standards.

**January 2021,**                                        **Assoc. Prof. Ph.D. Ana Maria Aurelia PETRESCU,**
Teacher Training Department,
Valahia University of Targoviste, ROMANIA.

# CAN JULIEN D'HUY'S COSMOGONIES SAVE US FROM YUVAL NOAH HARARI?

Prof. Ph.D. Jacques COULARDEAU
Université Paris 1 Panthéon-Sorbonne, 8 rue de la Chaussée, 63880 Olliergues,
FRANCE,
E-mail: dondaine@orange.fr

## ABSTRACT

*Over the last two decades, we seem to have been confronted with a tremendous number of books, films, TV shows, or series that deal with the past and the present, not to mention the future, as if it were all out of time, timeless, even when it is history. We have to consider our present world as the continuation and the result of the long evolution our species has gone through since we emerged from our ancestors 300,000 years ago. Julien d'Huy is a mythologist who tries to capture the phylogeny of myths, and popular or folkloric stories that have deep roots in our past and have been produced, changed and refined over many millennia. Can he answer the question about how we have become what we are by studying the products of our past and present imagination? But confronted to the prediction of Y.N. Harari that our species will simply disappear as soon as the intelligent machines we are inventing and producing take over our bodies, brains, and minds in just a few decades, Julien d'Huy sure sounds like the antidote because at every turn in our long history we have been able, collectively, to seize the day, and evolve into a new stage in our life, both biological and mental, not to mention spirituality. Let's enter Julien d'Huy's book and find out the power and the energy that will enable us to short-circuit and avoid Yuval's nightmare.*

**Keywords:** phylogeny; mythology; language; migrations; out of Black Africa; Eurasia;

## INTRODUCTION

Julien d'Huy's book is in French and it is a choice that will reduce the outreach of its ideas and concepts, particularly this phylogenetic method Julien d'Huy[1] advocates and practices. This book needs an English version (I do not say translation because translating is always a betrayal of the original) to reach the international public that uses English as their research language. I will write this review in English and I will monitor all the translated quotations necessary.

The book is enormous and polymorphous. It is difficult to really discuss the whole book with a reduced number of topics because the book is not a treatise, well ordered and planned. It is in a way like the underbrush in a forest: it hides the big trees that are well lined and grown for later production of good wood. We are at times lost in the underbrush that also contains some brambles. We have to choose a few questions and try to get a synthetic version of these questions in the book or rather out of the book. The first work we have to do is "extraction" meaning to extract some rather well-constructed visions of some central questions. But you will not find this structured and synthetic approach to these particular

---

[1] Julien d'Huy, Cosmogonies, La Préhistoire des mythes, La Découverte, Paris, 2020

questions in the book. You have to read the book the way it goes and then to collect what you think is important on the questions you are trying to sort out. That explains why in the book at times there are contradictions or contrasted opinions that seem to be contradictory, but they are most of the time inspired from this or that ethnographer, archaeologist, mythologist, or anthropologist and they do not always reflect what the author may think, and yet they are part of his presentations without being denied, falsified, or rejected.

I will follow my own way of approaching the questions, the book, the field of research Julien d'Huy positions himself in, and try to argue the points as fairly as possible but always from my point of view, that of a phylogenetic linguist, and what's more, a psychomechanic or psychosystematic linguist for whom the mind that contains the "langue" of the subject is a virtual construct in the central nervous and brain system of Homo Sapiens, knowing that this mental level is all a construct built from experiential existentialism on the basic tools that the senses, the nerves, and the brain are. If we want to understand that mental phylogenetic dimension, we have to consider the brain itself in its own functioning, knowing that the brain contains some potential competencies that are only the possibility to virtually develop from daily experience in each subject virtual constructs that will govern and guide mental, physical, and social activities in the various subjects engaged in some communication and commerce with other individuals. That goes a long way beyond this book, and I will not enter this exploration. But today the brain is no longer a complete mystery and we have the means to understand – probably never completely – how it works. But we also know that it changes every day in every individual and it develops new means, new virtual constructs all the time to cope with the new elements we are confronted with in life.

## 1. THE FIRST MIGRATION OUT OF AFRICA.

This principle or idea is constant in the book even if it is not always referring to the same dates or a clear definition of what the migration is all about: Who are the Homo Sapiens migrating here, where from and where to, along what route? The second question is: What language do they speak? Not so much the particular language but what level of linguistic phylogenesis have they reached when they leave the nest of Africa and enter a future in which they will go on developing their languages but without stepping out of the particular level of phylogenetic development reached when they left.

Yet before answering such questions we have to define the "Africa" Julien d'Huy is speaking of. It is in fact specified only once in the book as "sub-Saharan Africa" (p. 120) and clearly exemplified in one map (Map 3.2 World distribution of "emergence" myths (Le Quellec, 2014, "Une chronostratigraphie des mythes de création."[2] In this particular map, there is one dot on the northern African Mediterranean coast and thirty-seven dots in sub-Saharan Africa. The other mentions of migrating out of Africa is just that and is never specified. The phrase North-East Africa is used once but is not clear if it is the Horn of Africa that is part of Black Africa, or if it includes Egypt, which is not part of Black Africa. Then he often speaks of the first migration out of Africa and by the dates that are attached to this event we are probably dealing with what is for me the third and last migration out of Black Africa. Let me be clear on this timeline.

1- **First migration out of Black Africa** (the nest of Homo Sapiens being the section of the African continent going from the Horn of Africa to South Africa along the Indian Ocean and covering originally a strip of land that is about one third of the width of the southern part

---

[2] "A chronostratigraphy of creation myths", *Eurasie* n° 23, p. 51-72)

of this nest (Black Africa as a whole). This migration occurred early in the history of Homo Sapiens probably starting as soon as 250,000 BCE. It covers Egypt, Libya, North Africa, and the Sahara. These migrants will attempt a migration to the Middle East via the Sinai around 80,000 BCE but they will come back fast, (Harari[3] will ironize in his recent books about their being quite behind the Neanderthals they found there) and they will try again only around 35,000 BCE. These people all speak one family of languages generally called Semitic and identified as Afro-Asiatic by Joseph Greenberg. These languages are all root-languages built on the first articulation of language in the phylogenetic evolution of language. Note this phylogenetic evolution is not man-made but is dictated by the inner architectural and structural characteristics of articulated language that started long before Homo Sapiens, with the big apes and monkeys, then of course with Homo Erectus and his descendants. Homo Sapiens was probably the first Hominin to fully control the first articulation of the rotation of vowels and consonants, which enabled him to easily produce at first a couple of thousand lexical items that became lexical items due to their number and the possibility to attach them to referents (objects, persons, actions, etc.). Before, the ancestors of Homo Sapiens or his cousins Neanderthals and Denisovans must have mastered a couple of hundred items, which did not make it possible to really reach the next stage of phylogenetic development. This was the result of a limited number of vowels and consonants to be compared with only 8 or 9 calls among monkeys with 3 vowels and 5 consonants which should enable them to produce 5 power 3 items, hence 125 items. Monkeys do not control the rotation of vowels and consonants, so this potential is out for them. I estimate that Homo Erectus and even Neanderthals had reached 3 vowels and 7 consonants. The potential is at most 7 power 3 items hence 343 items when fully exploited. One extra vowel or consonant would push the potential into the thousands. Originally Homo Sapiens must have been able to utter 4 vowels and maybe 10 consonants getting the potential to 10 power 4, hence 10,000 items. Present-time human languages are working on 25 or more consonants and up to about 10 vowels. Imagine the potential of 10 power 25. We never use, in any language the full potential the vocalic and consonantal means available could produce. And we are only speaking of three-sound monosyllables (A-B-C, like cat mat pat, etc.)

2- The next demographic movement that will go on all along is the progressive migration of Black Africans west as far as the Atlantic Ocean. But it is the expansion of the nest more than a migration out of Black Africa.

3- **The second migrations out of Black Africa** will go from the Horn of Africa along the Southern Arabic Corridor to the Straight of Hormuz and then to the whole of Asia where they will meet the Denisovans. This migration must have taken place around 120,000 BCE. It is the second-articulation isolating language migration: the languages there have invariable categorized items also known as characters that are "stems" derived from the roots of the first articulation. The categorization concerns spatial or temporal dimensions producing basically two types of items, spatial items (nominal in general linguistic understanding) and temporal items (verbal in general linguistic understanding). Note many of these languages have retained intonation, tone if you want, as a discriminating element added to the various characters or lexical items, and these tones are semantically pertinent. Apparently, in South East Asia the contacts with Denisovans might have gone further than occasional contacts because of the higher proportion of Denisovan genes among the people there, higher as

---

[3] Harari, Yuval Noah, *Sapiens, A Brief History of Humankind*, London, Vintage, 2011. Harari, Yuval Noah, *Homo Deus, A Brief History of Tomorrow*, London, Vintage, 2015

compared to the descendants of this migration in the rest of Asia who have about the same proportion of Denisovan genes as we Europeans have inherited from sexual contact with Neanderthals, and further integration of the hybrid children and their mothers in the Homo Sapiens communities. It is important to insist on this fact because Julien d'Huy, without ever speaking of pre-Sapiens Hominins, does specify that South East Asia and Melanesia is a fundamental source of mythologies to be found in South America, though he does not seem to have integrated into his corpora the mythologies of Olmecs, Mayas, Toltecs, and hardly integrated some Aztec mythology. We have to keep in mind that 75% of the native American population will be genocided by diseases and war after the arrival of Columbus and that lost population will be progressively replaced by Europeans and notably by African slaves. No one can tell the impact such a massive population processing may have had on the mythologies of these vast areas.

4- **The third and last migration out of Black Africa** from the Horn of Africa along the Southern Arabic corridor to the Strait of Hormoz and then to the Middle East was only going to start around 70,000 BCE. The first wave was the agglutinative third-articulation language speaking people that spread to the whole of Europe and around the Caspian Sea to Central Asia, Siberia, Mongolia, Manchuria, as for the east, and to the Urals, northern Russia, Finland, and the Samis as for the west. Hungary is a recent migration from northern Russia and Finland. The second wave of this last migration out of Black Africa will stay on the Iranian plateau up to the Magdalenian and they will migrate west to Europe (the Indo-European branch) and east to the south Asian subcontinent where they will meet with people from previous migrations and push them "out of the way" mostly, taking over Pakistan, India, Bangladesh, Sri Lanka and slightly more in the Himalayas. We must understand that this last wave of out-of-Africa last migration met with Neanderthals in Iran and Asia Minor, but did not meet with Denisovans. A genetic study has to be done to see if the Indo-Aryan populations have any Neanderthals and Denisovan genetic heritage, and in what proportions.

## 2. THE QUESTION OF LANGUAGE IN MYTHOLOGY

Julien d'Huy sticks to the traditional approach in mythology studies, an approach that was developed theoretically based on a long practice (several centuries of colonialism starting with Columbus, and some older practices in Europe).

But the linguistic problem is a major problem with mythologists, and it is not a recent problem. Lévi-Strauss, who was not a linguist, pushes aside the problem of the language of the tales or myths.

"'The substance of a myth is not found in the style, nor the mode of narration, nor in the syntax, but the story told there. A myth is language: but a language that works at a very high level and where the meaning manages, so to speak, to detach itself from the linguistic foundation on which it began to roll.' (Lévi-Strauss, 1958: 232 )"

"According to Lévi-Strauss, the myth is therefore not *in* but *under* the words. It is because, in a myth, meaning takes precedence over sound, and it is possible to define it 'as that mode of discourse where the value of the formula *traduttore, traditore* tends to practically zero.' (Ibid .: 232)"[4]

---

[4] « 'La substance du mythe ne se trouve ni dans le style, ni dans le mode de narration, ni dans la syntaxe, mais dans l'histoire qui y est racontée. Le mythe est langage : mais un langage qui travaille à un niveau très élevé et où le sens parvient, si l'on peut dire, à décoller du fondement linguistique sur lequel il a commencé par rouler.' (Lévi-Strauss, 1958 : 232)

I am afraid the reduction of what Lévi-Strauss calls "style… mode of narration… syntax" to "words" by Julien d'Huy is typical of not understanding what a language is. It is in no way a set of words but a meaningful architecture that derives its meaning from many elements inside the language and outside the language used in any utterance. But I would also disagree with what Lévi-Strauss[5] actually said. The reference of Julien d'Huy to Roman Jakobson's[6] "intersemiotic translation," is indeed a case of "traduttore, traditore," not in words really but in cultural references.

Jakobson (JAKOBSON, Roman (1959), ("On Linguistic Aspects of Translation", *in* BROWER, (ed.), *On Translation,* Cambridge*,* MA: Harvard University Press, p. 233) distinguishes three ways of interpreting verbal signs: intralingual translation (translation into other signs of the same language); interlingual translation (translation into another language); and intersemiotic translation (translation from language into another nonverbal system of symbols).[7]

The shift from "translation from language into another, nonverbal system of symbols" to what mythologists do, translating from one language into English, or whatever other languages, is, of course, a mirage. It is clear that a story in an ergative language that considers the whole story from the point of view of the direct object that is submitted to all the actions, and not from the point of view of the subject, hence the agent of the actions, has an impact on the story itself. It is not even equivalent to the story in the passive voice that often genericizes the agent or rejects it/him/her/them as unimportant. Ergativeness makes the story become a sort of fate or curse or an inescapable situation or set of actions that roll over the agent and other actors in the story. It gives this direct object that is normally the submissive target of the action a dimension that becomes supernatural by being un-natural and being received by the speakers of such a language as natural. It becomes natural to see the world as rolling over you. Read Sumerian stories in that light and you find out their Gods are not much since some cosmic order that they should dominate is freely rolling over them without them being able to do anything, at least anything efficient. I just wonder if in phylogenic depth ergativeness was not the basic syntax of human language. The escape of the human hero in the Polyphemus myth from his destruction by the cyclops, monster, master of animals, etc., to which he, the hero, should have submitted because the cyclops, monster, master of animals is the big meta-ergative fate or curse that is supposed to roll over the human agent, the actor or acting individual. It would thus be interesting to compare the original languages of the various versions and find out how this escape from fate is

---

« Selon Lévi-Strauss, le mythe n'est donc pas *dans* mais *sous* les mots. C'est parce que, dans le mythe, le sens prime sur le son qu'il est possible de le définir 'comme ce mode du discours où la valeur de la formule *traduttore, traditore* tend pratiquement à zéro.' (*Ibid*. : 232) »

[5] Claude Lévi-Strauss, (born Nov. 28, 1908, Brussels, Belg.—died Oct. 30, 2009, Paris, France), French social anthropologist and leading exponent of structuralism, a name applied to the analysis of cultural systems (e.g., kinship and mythical systems) in terms of the structural relations among their elements. Structuralism has influenced not only 20th-century social science but also the study of philosophy, comparative religion, literature, and film.

[6] Roman Osipovich Jakobson, (Oct. 11 [Sept. 29, Old Style], 1896, Moscow, Russia—July 18, 1982, Boston, Mass., U.S.A), Russian born American linguist and Slavic-language scholar, a principal founder of the European movement in structural linguistics known as the Prague school. Jakobson extended the theoretical and practical concerns of the school into new areas of study.

[7] **Kay L.** O'Halloran**, Sabine** Tan **and Peter** Wignell, "Intersemiotic Translation as Resemiotisation: A Multimodal Perspective", *Signata*, 7 | 2016, 199-229.

translated in the different languages of the different versions. And here "translated" means "rendered" and "experienced."

For having been confronted with teaching the English of Buddhism to Sri Lanka Buddhist students and monks, I know from experience how drastically treacherous translation can be. I had a difficult time with some Buddhist concepts with my students. The case of "dukkha," one of the three basic concepts of Buddhism (along with "anicca" and "anatta") is typical. To translate it as "suffering" refers in our western, mostly Christian, and even more and more Muslim traditions, to something that has nothing to do with the understanding of this concept within Buddhist philosophy and in Pāli. First, it cannot be understood outside the other two, and second, it does not mean suffering, it means the fact that nothing is stable since everything changes (anicca) and that produces a total absence of essence, stable being, the concept of a permanent soul or self (anatta). It is a positive feeling of deprivation that encourages the Buddhist to meditate and constantly examine the inner mind of his or her as something that changes constantly; then to always wonder what you provide other people with, what you give them, what you share with them. This attitude can only be seen as suffering by people who refuse plain ordinary simple existential facts and want the whole world to be what they consider it has to be to satisfy their desires. This western attitude is typical of another central concept of Buddhism that is so difficult to translate too, the concept of "tanha", though it is simpler because if you add an adjective to the noun "attachment" then you have something close to what "tanha" means: "excessive attachment," or "obsessional attachment" and that excess can go as far as "addiction", hence "addictive attachment" with a possible discussion whether it is "addicted attachment" or "addicting attachment." Note you have here the opposition between ergative and agentive linguistic architecture in full revelation for both elements concerned: the subject who experiences that attachment and the particular element to which the subject is attached, that takes control of the addicted subject.

I do not think Levi-Strauss was right. It was an easy way to do things for the outside public, but he must have known from experience that the mythologist or anthropologist he was could only get to the meaning of these tales when they were in their original language and what's even more important in their original rendering: they are stories and storytelling is fundamental to understand the story and to have the proper reaction – the one you expect – from your audience. In other words, this linguistic approach limits the human dimension of the myths, and they are the products of human experience over millennia, which can never be actually reconstructed, and Julien d'Huy is clear about one thing: you cannot actually and factually go beyond let's say 20,000 years ago, in fact, less. You can only induce from what you more or less know about 15,000 BCE what it could have been before the Ice Age Peak (19,000 BCE).

"Let's dismiss an unworkable idea right away: phylogenetic methods cannot be sure of discovering the primitive form of a story in the sense of a *Urform* – an original version from which all variations of the myth would come. They can only offer statistical reconstructions where the identified features are not necessarily the most frequently encountered in the different versions. This reconstruction of a mythical prototype is to be understood in terms of higher or lower probabilities, any certainty remaining illusory in this area. " [8]

---

[8] "Écartons tout de suite une idée irréalisable : les méthodes phylogénétiques ne permettent pas de découvrir avec certitude la forme primitive d'une histoire dans le sens d'une *Urform* – une version originale d'où proviendraient toutes les variantes du mythe. Elles ne peuvent que proposer des reconstructions statistiques où les traits identifiés ne sont pas nécessairement les plus fréquemment rencontrés dans les différentes versions.

But let me take an example from Julien d'Huy own prose. It has to be considered in French to make sense:

"Dans ces récits, une fille visitée nuitamment par un inconnu le colora pour l'identifier le jour levé; elle découvrit alors qu'il s'agissait de son frère et le dénonça: l'un devint la lune, l'autre le soleil."

First translation: Google Translate, not corrected:

"In these accounts, a girl visited at night by a stranger colored **it** to identify **it** when the day **broke**; she then discovered **it** was her brother and denounced him: **one** became the moon, **the other** the sun. "

Corrected translation:

"In these accounts, a girl visited at night by a stranger, colored **him** to identify **him** when the day **would break**; she then discovered that **he** was her brother and denounced him: **the latter became the moon, the former the sun."**

If we read the French version normally "l'un" is the first mentioned and 'l'autre" is the last mentioned, hence "l'un" would be the girl (elle découvrit) and "l'autre" would be the brother (son frère). Hence a contradiction since the girl is feminine but "l'un" is masculine. So, we correct the understanding and "l'un" becomes the brother against the normal syntax of French. The text should have been "l'une devint le soleil, l'autre la lune." But the mental correction of plain syntax is fine since the masculine "l'un" can only be the brother.

But in English, it is even more confusing since "one" can only refer to the girl, and "the other" can only refer to the brother with no gender difference between the two "one" and "other." You have to correct the translation then as I did but it is not that elegant, and I would prefer the following version:

"In these accounts, a girl visited at night by a stranger, colored **him** to identify **him** when the day **would break**; she then discovered that **he** was her brother and denounced him: **the brother became the moon, the sister the sun."**

But even so, there is a cultural contradiction between the gender of the brother and the moon on one hand, and between the sister and the sun on the other hand in our own mind (Note in German the sun is feminine, "die Sonne," and the moon is masculine, "der Mond," though they would commonly be impersonated in the reverse sexual reference, the sun male and the moon female), though in Native American culture, Maya for example, the moon is ambiguous and can be either masculine or feminine and the sun is also complex, especially, like in Maya, when gender distinction does not exist in the syntax of the language, though the representation of the sun and moon in the codices, for example, would be female for the Moon and male for the Sun. In Maya, the third person singular is "he/she/it." But to be specific, Maya has eleven glyphs for this word which is also the simple vowel /u/.[9] Note in the first eight glyphs there is a rather common structure based on a triad of elements, often the first and third identical, the second and middle one different. The three heads are different and more complex. Some may think they might be older.

---

Cette reconstruction d'un prototype mythique est à comprendre en termes de probabilités plus ou moins élevées, toute certitude demeurant illusoire en ce domaine." (page92)

[9] John Montgomery, *Dictionary of MAYA hieroglyphs*, Hippocrene Books, Inc., New York, 2002, available in free access at http://www.famsi.org/mayawriting/dictionary/montgomery/index.html#:~:text=John%20Montgomery's%20Dictionary%20of%20Maya,part%20of%20speech%2C%20and%20meaning.

u/U (u) (T13)   u/U (u) (T191)   u/U (u) (T1)   u/U (u) (T1)

u/U (u) (T204)   u/U (u) (T232)   u/U (u) (T3)   u/U (u) (T513)
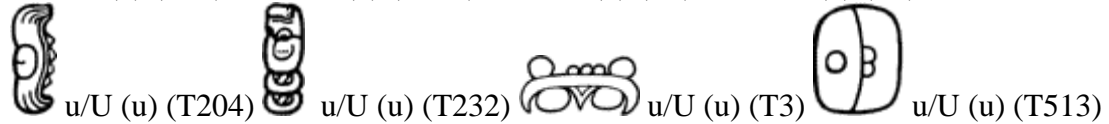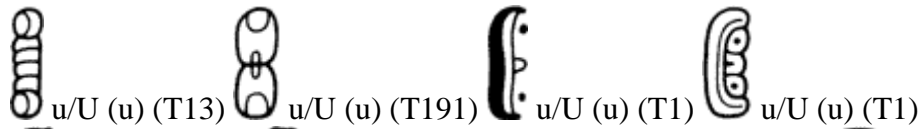
1> vowel u   2> 3rd person pronoun "he, she, it"   3> 3rd person possessive pronoun "his, hers, its."

u/U (u) (T1008v) 1> vowel u   2> 3rd person pronoun "he, she, it"   3> 3rd person possessive pronoun "his, hers, its." <> (John Montgomery) Represents a human head with closed eye.

u/U (u) (T738v) 1> vowel u   2> 3rd person pronoun "he, she, it"   3> 3rd person possessive pronoun "his, hers, its." <> (John Montgomery) Represents the head of a fish.

u/U (u) (T231) 1> vowel u   2> 3rd person pronoun "he, she, it"   3> 3rd person possessive pronoun "his, hers, its." <> (John Montgomery) Represents a human head with prominent lips.

The sun is "k'in", but the Lord Sun is "k'in ajaw" or "k'inich ajaw." It is "ajaw" that brings the idea of a male, the use of "k'inich" is interesting since it means "sun-eyed" and is commonly used with this meaning. We would interpret the brother turned into the moon as some kind of punishment or castration, provided we see the moon as feminine, and it is at least in the Dresden Codex.[10] Michael D. Coe and Mark Van Stone[11] suggest with great care that the goddess represented in this Codex as a young woman would be "Ixik" meaning "woman." Here is what John Montgomery gives us:

**IX/IXIK** (*ix/ixik*) (T1000b) > feminine agentive prefix; "woman."

The term "agentive" would lead us very far. But what about the sister turned into the sun? Is she really the god some might see in our western culture? I am not sure because the sun has the strange fate of dying in the west every night and being sent to the underworld to travel back to the east the next morning. I am not sure at all that spending the night in Xibalba is a sinecure for the sun, and being a woman is not exactly seen as a heroic position. Only the Hero Twins who are males managed to bring down the Death Lord.

---

[10] *The Dresden Codex: Full Color Photographic Reproduction*, CreateSpace Independent Publishing Platform (January 23, 2015), ISBN-13: 978-1507685877
[11] Michael D. Coe & Mark Van Stone, *Reading the Maya Glyphs*, Thames and Hudson, New York, 2001

That's what I mean when I say translating is not at all a good method to really approach a culture, a mythology, a myth. In my native Occitan dialect "la drôlesse" simply means "la fille," "the girl," as opposed to "le drôle" who plainly is "the boy." In the Paris Oil dialect, it has a very strong derogatory meaning. It definitely doesn't plainly mean "la fille." She is either "a pain in the backside" or "a dissolute girl," "a wanton girl," a Jane Calamity impersonated.

## 3. AGENTIVE VERSUS NON-AGENTIVE

I am going to enter here a very important question. Nothing has any value by itself. A lexical item has a meaning in the dictionary but the meaning of the same lexical item in discourse is nothing but the result of all the interactions within the discourse. De Saussure was insisting on two dimensions to determine the meaning of any "word": the paradigmatic elements to which the common practice of the concerned language in the community that uses it attach the said lexical item, plus the paradigmatic elements the speaking subject, or the listening subject attaches to this lexical item in the concrete discursive situation in which the word is uttered. And that's only one dimension and it has to be taken positively and negatively, what the lexical item is attached to positively and what the lexical item is attached to negatively, hence rejects. All that is purely cultural and immensely subjective.

But de Saussure also insisted on the syntagmatic connections, the direct connections of this particular lexical item to the other lexical items used in the concerned utterance. If I consider the Polyphemus myth, it all revolves around the agentiveness of the various characters: who has the initiative at every moment and who is controlled by fate which might actually be someone else's agentiveness.

The too common practice of associating one element to one meaning in total self-containment is making interpretation binary, one for one makes two, one item for one meaning makes two, whereas meaning in any discursive communication is always at the very least ternary or a multiple array of ternary elements, **one** item **in relation** with **one** item makes three from which I may be able to derive the meaning of the first and third items. The relation between the two items is central and it is the element that actually gives the proper meaning to both items. This is banal psychoanalysis from Sigmund Freud that condemns the Jungian approach, that Lucien d'Huy rightly rejects as the predigested corset or the prefabricated straitjacket it is, but he throws the baby along with the water of the bath, maybe be even the bathtub. Sigmund Freud always insisted that in dreams or any discourse, any element, symbolic by nature, by essence, can only draw its meaning from the relations it entertains with the other elements of the dream or the discourse. "The shielded tank of the state is stern-sculling over the maelstrom of the pandemic's volcano," has meaning despite its absurd and extremely pompous metaphors that are all contradictory and antagonistic to one another.

The Polyphemus myth Julien d'Huy analyzes in detail is typical of the shift from a non-herding hence non-agricultural society to a herding, hence agricultural society. This shift occurred sometime in the middle of the Magdalenian around 15,000 BCE. Marshack proved in his archaeological study of women's representations that it is the time when these representations changed from women being the fertile perpetuators of the surviving and expanding species to a secondary and more servile position under the domination of men seen as the masters of the earth, the agricultural earth. If you see that then the cyclops is a phantasmagoric invention representing the reconstructed masculinized past dominated by a male figure that probably has to do with the fantasized mammoth of European or Eurasian

prehistoric societies. In that period of change, the Ice Age was still present as the dominant force that imposed a strict reorganization of social life. It was from this duress when survival became a real emergency requiring a lot of adaptation and creativity, that agriculture was going to start emerging in something like 5,000 years all over the world. The myth confronts a totally isolated male cyclops that has no future since he has no female cyclops, in fact, no second cyclops of any sort, to a human who is not alone and has the task to both escape the cyclops and conquer the animals. These animals are not really herded by the cyclops but only kept in custody. The human (or humans) has (have) to conquer them and take advantage of the action of the cyclops caused by his (their) presence, i.e. the releasing of the animals by the cyclops in order to capture the humans since the cyclops believed the human(s) was (were) going to be dumb enough to stay behind, or that he, the cyclops, would be intelligent enough to manage to catch him, the human (them, the humans) trying to flee along with the animals. Herding would be the consequence of this release and escape, but to escape the human(s) had to establish a connection with the animals that broke or lured the connection he (they) found himself (themselves) in with the cyclops. He (they) was (were) enslaved as prisoners soon to become fodder for the cyclops. By first blinding the cyclops he (they) asserted their superiority, and he (they) caused the only action the cyclops can take: to release the animals so that the human(s) would be trapped. The human(s) was (were) thus obliged to use their mental agentive initiative to reduce themselves to appendices to the animals that were released to be able to escape, and subsequently taking the animals along, liberating the animals for herding. They are thus both totally un-agentive under the animals that are fully agentive but within the control from the cyclops, hence not agentive at all, and yet agentive enough for the totally un-agentive human(s) to be able to escape, and yet the human(s) was (were) really agentive in the planning of this escape. We are here in the basic communicational situation humans have been confronted with since Homo Sapiens emerged 300,000 years ago from their ancestors in Black Africa. But this communicational situation is realized in concrete action and the fundamental element which is the fact that any speaker is a speaker first but is a listener second before being a speaker again, and then a listener a second time, etc. This is another rotation similar to the rotation of vowels and consonants, in this case, the rotation of speaker and speakee, or listener and listenee. Trapped by the cyclops the human(s) reversed the situation and blinded the cyclops who did the only thing he could do to isolate the human(s) and capture him (them). He (they) is (are) trapped again but he (they) transformed this trap into an escape way by making himself (themselves) un-agentive appendices to the not really fully agentive animals, and yet he (they) became the direct agent(s) of the situation since he (they) took advantage of the wrongly devised decision of the cyclops to liberate the animals and him (them) and thus to bring herding to humanity, an unwise action of the cyclops and a collateral consequence of the action of the human(s). In this situation the world has been completely masculinized, women, being far away, and actually the prize of the long epic and picaresque voyage if they could manage to go back home.

Note this myth is in the very same pattern as the myth of the Hero Twins in the Popol Vuh of the Mayas. Males versus males to liberate the Maize God who was killed and buried by the Death Lords, which means the liberation of agriculture. They use animals, particularly insects but not only to fulfill the various challenges they are confronted with. It is in a way also comparable to the vast Chinese and Buddhist epic known as "Journey to the West" though in this case what is targeted is a set of spiritual Buddhist documents to establish Buddhism in China. This vast metaphor is the fundamental realization in an action of the

basic communicational situation of humanity that came to its full both virtual and real materialization with the linguistic emergence of Homo Sapiens 300,000 years ago. My point here is that man has to realize he/she has to be alternatively the agent of the action and the theme of the response to this action.
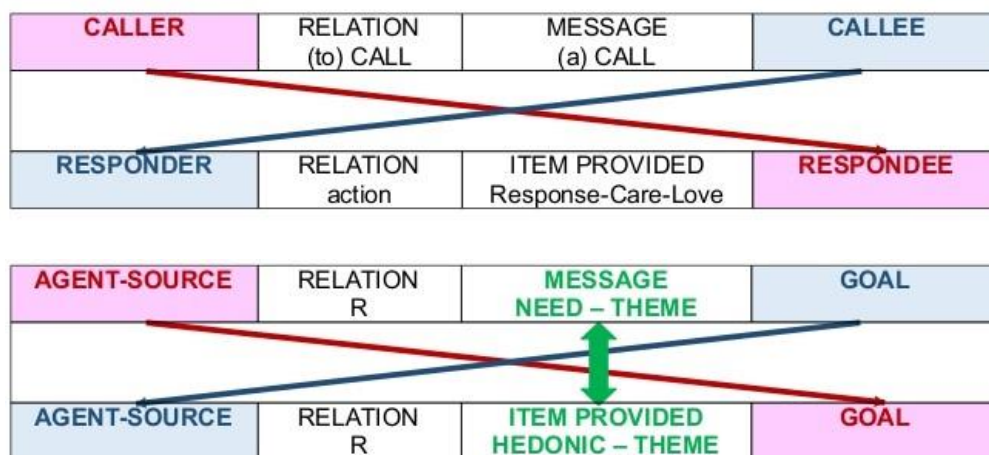


In fact, Julien d'Huy has it all right and yet he misses the point because he does not consider the linguistic communicational situation, or simply the communicational situation that has to be linguistic if human. Then the myth becomes the representation of the main change in modern archaeological or prehistorical humanity: the shift from hunting-gathering to agriculture-herding that goes along with the shift from a society in which the division of labor provided women with a central position, though in no way dominant, responsible for the survival and the expansion of the community via procreation and child-rearing, and thus also responsible for keeping the fire going and the spiritual rituals of impregnation-pregnancy-birth in the caves decorated by women, which implied a spiritual role. In fact, it is nothing but the continuation of Charles Darwin's principle that the selection of haphazard mutations is performed by women because of their choices of partners within sexualized reproduction, actually ritualized probably by women themselves seen as "midwives" before the Magdalenian shift, a role they will keep after the shift. The difference between humans and plain animals is the fact humans have developed a language that enables the communicational situation to develop linguistically.

If you consider these myths like this, in fact, if you consider that mythologists cannot go beyond this Magdalenian shift after the Peak of the Ice Age when the climate changed and the rising waters were finally coming, then you can look at all the areas in the world where that agricultural shift occurred, and you should find myths of the very same type that expresses the double shift that agriculture brought. First, the shift in social activities and resources: agriculture and herding implying sedentary living, hence the first "urbanization." Second, the shift from a certain balance between the social, spiritual, and economic roles of men and women (a balance that could be warped into the fantasized vision of a women-dominated society that did not exist) to a completely different situation with the domination of society by men, which brought up the development of what could be called animistic or polytheistic religions and later monotheistic religions with the same shift from a balanced male-female definition of the divine (including gods and goddesses) to a male-dominated definition of God. My approach then is not to take the myths that have been collected often

with limited systematicity, meaning systematic collecting but in some zones only with big empty areas like the Afro-Asiatic areas in Northern Africa and the Middle East. Apparently traditional myths and tales from Semitic civilizations (both Arabic and Hebrew) are not concerned here and identified as such, all the more because the original languages are rejected as non-significant. In the same way, Maya mythology and other mythologies before the Aztecs in Mesoamerica and South America are absent. And what about old Andean mythologies that are kept as long strings of knots that we do not even know how to "read." In that field, the most surprising absence is Maya mythology since the first academic researcher who actually started, after the Second World War in the 1950s and 1960s, the real deciphering of Maya writing system is from Saint Petersburg University, Leningrad University in his days. Julien d'Huy refers to several researchers from this Saint Petersburg University and yet Yuri Knorozov is not quoted, and Maya mythology is not integrated into Julien d'Huy's work, though Knorozov is today considered as the real trail-blazing researcher in Maya language, writing system, and civilization, hence Maya mythology that is only reachable because of his tremendous work.

As for agentiveness, Maya mythology would be a tremendous inspiration since it is by submitting to ordeals, challenges, sacrifice-including deals, and even volunteering for dying, that human objectives are reached because submission means resurrection and regeneration, stepping over a limit and entering a new phase of development. This vision has been vastly disturbed and distorted by the Aztecs who came from the North and assimilated a culture they found in Mexico, but they did not understand it at all. They pushed the bloodletting and blood-sacrifice practices to such extremes that it became a stigma on Native American culture in Mesoamerica and South America. To get convinced of that stigma developed by the colonial powers after Columbus, just read two or three chapters of D.H. Lawrence's *The Plumed Serpent* or *Quetzalcoatl*.[12]

If we implement this approach in the old hunting-gathering Hominin society and consider the ritualized procedure before hunting, a ritualized procedure that would normally have been performed by a human go-between, hence what many people call a shaman, and this time a male shaman, which rebalanced the fact that the procreational rituals were probably controlled by women who are the natural "midwives" of this human activity, the rationalization of hunting would have been as follows.

First, man becomes a hunter, or the hunter becomes human. If there is some initiation or ritualization it would be targeting the hunt itself. But the hunt does not work all the time. So, they would react in two human ways (like in Polyphemus). They would consider they had to target the animals themselves and ritualize the animals. But it still does not work all the time, though at the same time they observe the animals better and they differentiate the hunting techniques and probably the hunting weapons to be more effective. But this ritualization does not succeed all the time. Then Humans being, in many ways, paranoid thinkers, will start thinking there is a master of animals behind the animals. They will go on observing, finding patterns in the normal animal behaviors, they will improve the hunting techniques and the hunting weapons, and ritualize the master of these animals. That is what I would call the phylogenetic ritualization of the hunting activity in three stages, first the hunt itself, second the animals themselves (with differentiation), and then the master of animals (with maybe some differentiation).

---

[12] D.H. Lawrence, *The Plumed Serpent* , Vintage; Reissue edition, 1992. It is a 1926 political novel by D. H. Lawrence. Lawrence conceived the idea for the novel while visiting Mexico in 1923, and its themes reflect his experiences there.
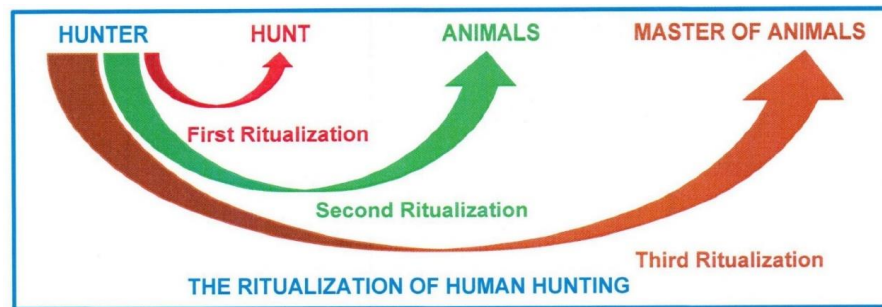
This representation shows that the concept of Master of Animals can only come last; I follow here the research of Lev Vygotsky, "Thought and Language,"[13] on conceptualization. There is no reason why Hominins or Homo Sapiens in their long emergence from plain animality to humanity would be able to jump directly to the concept of "master of animals." Human conceptualization in development in children and teenagers is always progressive. What is important here is not so much the ritualization but the other side of this activity, which is the observation of animals and the improvement of hunting techniques and hunting weapons. That makes it a real human activity, and that started a long time before the supposed symbolic revolution, no matter what name you give it, around 70,000 BCE.

This is founded on the modern understanding of the human mind in its progressive emergence after birth (and a little before birth). What I am going to say cannot exist without language, meaning that language is the main tool of this human development to discuss, explain, devise, implement the hunting techniques, tools, and weapons and improvements necessary in these and the possible ritualization required to make hunting effective.

You can of course imagine the very same process for the emergence of agriculture and herding. The Polyphemus myth is just the process I am describing here for herding, the very last attempt which liberates the animals hence domesticates them and brings them out of the wild Cyclops' cave for humans to take care of them. The successive actions of the humans, blinding and then attaching themselves under the animals, and finally managing to liberate the animals and escape, humans always keeping one step ahead of the Cyclops and thus always keeping the agentive initiative, even when they are obliged to make themselves totally submissive. This is based on human psychology, the way it can be observed today, and these myths show that at least after the Magdalenian shift this human psychology just works the same way as today. We assume the Magdalenian shift did not change this psychology and was in fact the result of this psychology confronted to the new conditions and thus able to adapt to these conditions and to ritualize their actions in these myths, through these myths, and finally, these myths represent the ritual thinking of the humans who devised them.

That's all we can say about this Magdalenian shift and what existed before, not reconstructed from the myths but analyzed from what we know about the communities before the Ice Age Peak, and I insist, not only in Europe but all over the world. Unluckily in that "all over the world" there are big empty zones because either we do not care to find out what is collected in these zones, or because no collecting has taken place for many reasons, among others the fact that the West does not really care about them.

---

| SENSES SENSATIONS | BRAIN PERCEPTIONS | BRAIN DISCRIMINATE | BRAIN BRAIN-CODE-TAGGING |
|---|---|---|---|

CENTRAL NERVOUS SYSTEM: BRAIN WORK BEFORE LANGUAGE

| OBSERVE ANIMALS | EXPERIMENT HUNTING | DISCUSS SPECULATE | CONCEPTUALIZE HUNTING |
|---|---|---|---|

THE MIND: LINGUISTIC CONCEPTUALIZATION

**FIRST HUNT**
1. observe Animals living Cycles
2. Hunting techniques, weapons
3. Works or doesn't work
4. conclusion keep and go on or change

**Ritualization of the Hunt**

**SECOND HUNT**
1. observe Animals living Cycles
2. Hunting techniques, weapons
3. Works or doesn't work
4. conclusion keep and go on or change

**Ritualization of Animals**

**THIRD HUNT**
1. observe Animals living Cycles
2. Hunting techniques, weapons
3. Works or doesn't work
4. conclusion keep and go on or change

**Ritualization of Master of Animals**

**PHYLOGENETIC MENTAL CONCEPTUALIZATION OF HUNTING FOR HUNTER-(GATHERERS)**

## 4. PROTO-MYTHS OR UR-MYTHS

I consider the retrospective reconstruction of what we cannot reach beyond a certain limit in the past is totally out of the question. It leads to the concepts of Proto-myths and Ur-myths, and I do not see the difference between the two. Phylogeny tells us one form of anything can only be captured in descent, hence the question to know what it comes from really, and not from a retrospective reconstructing procedure. Just the same way as it leads to the concept of Proto-Indo-European in Indo-European linguistics, a concept which is extremely debatable since no specification on the people speaking this language, where they came from, and what language or languages they spoke before can be provided or answered. In fact, the questions are not even asked. The battle on this point is the same for languages and myths, for linguists and mythologists. We have to try – if we can – to analyze what was before the stumbling block and try to understand what kind of psychogenetic procedures and situations Homo Sapiens was living in before that stumbling block.

Then we can compare this knowledge we collect to what we know about the same psychogenetic situations after the stumbling block. This stumbling block is a stumbling block for people who want to go backward to the period before. This is impossible. The stumbling block is a divide in labor division. It will not happen all over the world on one precise date. 15,000 BCE seems to be reasonable for the beginning of it in the most advanced areas. Between the Ice Age Peak and this Magdalenian divide, Homo Sapiens must have learned how to get as much as possible from nature, hence, to take care of nature and it is from this taking care of nature that agriculture and herding will come. It did not happen everywhere the same way and at exactly the same time, and yet by at the latest 5,000 BCE all over the world it will be essentially finished, completed. There is a divide, but not the one that those who defend the idea of a cognitive revolution of some type. It is a change that will take several thousand years to come, and I repeat that the main change is a change in the division of labor, from a balanced division between the sexes to a division of labor based this

time on the type of work, and the type of control of the soil, and the work taking care of this soil. It does not always imply private property of the soil.

The Incas for instance did not have the concept of property or ownership for the soil which was controlled collectively. But in some other areas, particularly Europe and the Mediterranean area a new form of work was invented, slavery, though the real inventors of slavery as for the western world were the Egyptians and the various empires in the Middle East, and Greece. We must be careful about this concept of slavery. It covered many different statuses, from the worst possible based on violence like the gladiators in Rome, since they had to fight, and they will always be confronted with the choice "kill or be killed," and there was practically no escape from being killed sooner or later. That was a pure human sacrifice with the first potential sacrificee fighting for his life against another potential sacrificee that was doing just the same. At the other end of this social continuum of slavery, some slaves had tremendous power and influence. Julius Caesar's secretary was his slave, which was not comparable with a gladiator in the Coliseum. In-between, you had all sorts of workers from mine-slaves to house-slaves.

One thing is sure about all slaves: the master, or the mistress, could kill any slave of their own if so, they decided. And you did not need to be drunk to fall into some obnoxious treatment of your slaves just like the famous emperors Nero and Caligula, though Tiberius was also a case along that line. And we are speaking here of the exploitation of slaves as workers of some sort producing some goods or value-adding services. We should also take into account another type of slaves: pleasure slaves that were supposed to satisfy all the impulses, drives, and hormonal needs of their masters, or their "customers." We have to keep in mind also that the importation of black slaves from Africa started very early in the Mediterranean area and around the Indian Ocean. Black slaves were common in Egypt, the Middle East, and the Roman Empire.

If we want to understand the phylogeny of language or any human production, we have to keep in mind the following timeline. What is most important is that an essential divide occurred around 15,000 BCE, but it took several thousand years before being effective, and in many areas in the world the transformation may have started later and may have taken longer to become effective.

The word revolution would not really describe what happened. It is a shift, but it was prepared by, or it was the result of a long evolution from several thousand years before the Peak of the Ice Age when the various population in some areas where it turned out to be too cold for survival, and at the same time where natural resources for hunters and gatherers became too scarce, had to regroup south or north according to the hemisphere they were living in. When you keep in mind the fact that the major migrations out of Black Africa are finished by then, Homo Sapiens has reached the whole planet, migration after migration, with the necessary cohabitation of people who arrived in one area in successive demographic waves, differentiated by the languages they spoke, the phylogenic levels of these languages, hence the different cultures they carried.

This cohabitation implied exchanges, borrowings, but also keeping apart, and a lack of comprehension and understanding, difficulties to communicate, etc. And these populations had had contacts with Neanderthals and Denisovans that were different with different levels of integration of the distant Europeans and Asian cousins, and all it meant: mixing genes, integrating the hybrid children and their mothers in the Homo Sapiens communities, maybe the integration of some males from these cousins of ours to keep the concerned hybrid children and the Homo Sapiens mothers. What was the impact on the languages of the

various communities? What about the culture and the myths? One thing can be considered as sure: the communicational situation as such was similar, and that of the integrating community, hence Homo Sapiens, became dominant for these Homo Sapiens communities and there integrated Neanderthals and Denisovans.

| PALEOLITHIC PREHISTORY – 300,000 to 15,000 BCE — MEMORIZED & RITUALIZED COMMUNICATION | | | LABOR-DIVISION TURNING POINT | MEMORIZED COMMUNICATION | MECHANIZED COMMUNICATION | |
|---|---|---|---|---|---|---|
| BEFORE | ICE AGE PEAK | AFTER | MAGDALENIAN AGRICULTURE-HERDING DIVIDE | AFTER | WRITING SYSTEM | AFTER |
| UP TO 19,000 BCE | 19,000 BCE | UP TO 15,000 BCE | CIRCA 15,000 BCE (minimum, varying with the areas in the world) | ABOUT 12,000 YEARS (ritualized control of people, military violence and religious power) | CIRCA 3,000 BCE | PRINTING PRESS 1450 CE TELEPHONE RADIO CINEMA TV INTERNET – LAST 120 YEARS |
| Paleolithic labor division **Hunting:** men and rituals **Survival and expansion:** women, procreation and rituals | Survival By all Means, Regrouping, Collective organization | Start taking care of nature Climate change Water rises: coasts, rivers, etc. Challenge of change, including migrations | Shift **FROM** Territory for hunting, gathering, fishing **TO** Control of soil and work of it, slavery, women's ancillary position | Memory able to keep and transmit all that has to do with modern society reworded in the terms of the new agricultural order | Commerce Education Memory Legal documents Mythology Ritualistic documents History Scribes | Libraries Archives Conservation and preservation Librarians and archivists |

But we have to keep in mind another element that we tend to ignore in modern times. If we consider 300,000 BCE was the time when Homo Sapiens started its evolution, its emergence (based on what they inherited from their Homo Erectus and Homo Ergaster ancestors), Homo Sapiens society and culture were purely oral up to the invention of writing that occurred around 3000 BCE in various places in the world, certainly not in only one place from where writing would have spread. That might be right for the Middle East, with Sumerian, or linear Elamite in Iran[14], and this writing spread, but the concept spread more than the writing system itself, and other writing systems were devised in Egypt, among the Phoenicians, and then the Greek, the Romans, the Celts, the Germanic tribes, etc. With two tendencies: to represent syllables or to represent independent sounds, and in this latter case to represent all the sounds or only the consonants. Homo Sapiens was an oral civilization for 297,000 years and has been a written civilization for only 5,000 years, and if you consider the invention of the printing press for only 570 years, or the invention of mechanical oral or audio-visual communication, then, Homo Sapiens has been an audio-visual communicator only for 120 years or so. We must also consider that the paintings in the cave and all the engraving on bones, antlers, or mobile rocks were also some kind of pictorial, or representative autonomous ways to communicate even if it was not a writing system per se. And before Homo Sapiens used durable media, they probably used some non-durable media that have been lost, but they may have lasted for some time and have been some communicational media for Homo Sapiens before engraving, painting, and carving on stone or bone. What I say here is that communication requires some level of abstraction, conceptualization, and a communicational situation, and human communication have lasted a long time more than what some consider (there undoubtedly was some oral communication in older Hominins), blocking their own thinking with some supposed symbolic, conceptual, or cognitive revolution. Human communication, hence human conceptualization, hence human abstraction, and symbolical thinking started a long time before 70,000 BCE. It started as soon as human language assumed the full power of the first articulation based on the rotation of vowels and consonants in numbers sufficient to produce several hundred thousand "phonetic units" that could not be calls anymore and started becoming lexical items. By 160,000 BCE at the latest (and I would personally push it a lot more in the past to 250,000 BCE) that first articulation was reached and fully operational, otherwise the migration to northern Africa, and what's more, Crete, would not have occurred at all.

The second thing I say is that no retrospective, reconstructive procedure trying to reconstruct from a later state of language what language was in an earlier state is doomed to get blocked before the peak of the Ice Age, in fact, somewhere around 15,000 BCE, that is to say, the Magdalenian divide. That's the practical proof that the change that took place then, the development of agriculture and herding, the tilling of the soil by workers controlled by some kind of authority, the shift from hunting territory to tilling land was deep enough to cause a rewriting of what existed before. In linguistics, even Proto-Indo-European is tentative and problematic, but in culture and mythical or literary representations it is even more problematic because we are not dealing with phonemes but with constructed mental

---

[14] Étienne Dumont, "Le Français François Desset a déchiffré au bout de dix ans l'élamite linéaire," 31. décembre 2020, in *Bilan*, depuis 1989, Bilan est le média de référence dans le domaine économique en Suisse romande. https://www.bilan.ch/opinions/etienne-dumont/le-francais-francois-desset-a-dechiffre-au-bout-de-dix-ans-lelamite-lineaire. "Iran had its own independent writing system 4,400 years ago: study," December 25, 2020, *The Tehran Times (TT)*, https://www.tehrantimes.com/news/456174/Iran-had-its-own-independent-writing-system-4-400-years-ago

signifying and significant representations of the life existentialist experience of their own evolution by Homo Sapiens themselves without any intermediary, not even a writing system that could leave something behind as a testimony of what it was like before.

And that's where I consider the binary system of phylogenic trees is misleading because the experience of life is never binary but always at least and basically ternary. Phylogenetic trees have to represent real life. What is important is not so much two mythemes set side by side. What is important is the contact point, the relational point between these two side-by-side mythemes, just like in phonology (for synthetic voice production) what is important is not the two phonemes that are connected, but the point of connection between the two phonemes, hence the articulatory point between these two phonemes, and this articulatory point changes from one individual to another, from one language to another (provided we are considering similar phonemes), etc.

Julien d'Huy does mention the three basic animals he identifies as the mammoth seen as an underground digger of big tunnels or caves and coming out of it from time to time, but also as the one who makes mountains come up. Then the snake, and finally the bird. He associates snake and bird with the reference to dragons. This is quite centered on Eurasia and it does not take into account other continents. In Mesoamerica for example, among the Mayas and other civilizations, we find another triad of animals. One feline, voracious and aggressive, most of the time the jaguar, then the serpent, and the bird, those latter two often merged into the famous "plumed serpent," "Quetzalcoatl" or "Kukulkan." Another animal is often referred to, bats that live in caves and come out at night. They are dangerous and they drink blood. What is important here is that these triads of animals represent the cycle of procreation. You first have to ingress in order to impregnate the woman (mammoth or another symbol of such penetration). Then the mountain that can come out of it, or the snake that develops inside, then the bird that escapes from it and represents life, birth, the child. Three movements: penetration (impregnation) – growth inside (pregnancy) – take flight (delivery). You find this triadic set of movements in many mythologies, but you have to conceptualize the three phases from what is only a metaphorical representation. Penetrate inside: go down into the under-the-surface cave or plunge into the water to recuperate some earth from the bottom. Then it has to grow, expand to become something that emerges from the original watery ocean, or that grows from the earthen surface like a mountain. Then it has to emerge and fly on its own. It is also the cycle of the sun that emerges from under below in the East, then goes up to its climax, and then goes down and is buried under below in the underworld for the night, and the cycle starts again. It is also the menstrual cycle that emerges from the period and moves to the fertile phase of a few days and then goes down to be buried into the period that is the end of the cycle. That's also the cycle of life, birth first, life second, death third. It is also the cycle of death: death first, then the confrontation with the Death Lord in "Xibalba" and the underworld, then victory and rebirth in the north to climb the ceiba tree to the sky, "chaan/kaan." This ternary symbolical or real functioning is fundamental. The fact that it is elaborated as ternary is a human ideology, but it is essential and universal experiential and existential consciousness.

I just gave the vision from the Mesoamerican point of view. But you have the same in Europe with the Triple Goddess that comes from very far away. Demeter in Greek mythology who is three goddesses in one, long before the Christian God: Hecate the goddess of magic, witchcraft, the night, moon, ghosts, and necromancy; Diana the virgin goddess and protector of childbirth; Selene the goddess of the moon. In my village, in the 10th-century church, there is a stone that represents a female wolf with a dedication around it to

DRIMIDRI which a twice ternary Demeter (Tremeter if you prefer) who carries her ternarism in her own name. And of course, this ternariness can be found in the three Furies or Harpies, Aello ("squall"), sometimes named Nicothoé ("quick feet"), Ocypèt ("fly fast") and Podarge ("light feet"), sometimes named Céléno or Celaeno ("dark"). Then the three Fates, Nona (Greek equivalent Clotho), who spun the thread of life from her distaff onto her spindle; Decima (Greek Lachesis), who measured the thread of life with her rod; Morta (Greek Atropos), who cut the thread of life and chose the manner of a person's death. And they become in European Germanic folklore the Three Beten: The name Beten first appeared in the works of Hans Christoph Schöll in the 1930s, derived from the common ending of the three women's names, of which some variants are: Einbet(h), Ambet(h), Embet(h), Ainbeth, Ainpeta, Einbede, Aubet; Worbet(h), Borbet, Wolbeth, Warbede, Gwerbeth; Wilbet(h), Willebede, Vilbeth, Fürbeth, Firpet, Cubet. They are associated with colors: The Austrian author Georg Rohrecker gives an interpretation of the colors as follows: white – becoming, waxing – sunrise; red – fertility, being in full blood – midday; black – waning, going down, being at home – nightfall. Unfortunately, the first depictions of the Bethen in these colors date from the high middle ages. There is no way of telling if the colors are an invention of medieval artists or if they are indeed rooted in the pre-Christian past. In their Christianized version, the Bethen are St. Margaret, St. Barbara, and St. Catherine. In Bavaria and parts of Austria, they are known by the old folk rhyme.

"Margareta mit dem Wurm,
Barbara mit dem Turm,
Katharina mit dem Radl,
das sind die drei heiligen Madl."[15]

The "Wurm" is a dragon in standard Medieval language who lives in some cave. The Turm is a tower and could be considered as equivalent to the mountain caused to grow by the mammoth. The Radl is a wheel from which the thread comes, is produced. They are also associated with the fundamental activity of women in ancient times, hence the distaff, the spindle, and the spinning wheel that produce the thread that will be used to weave cloth or sew and embroider.

If I follow the idea that the Magdalenian divide changed the labor division for women, then women remain the progenitors, but they also get some new activities like spinning and weaving. What is fundamental is that this ternary definition of women is in phase with the fundamental cycles of women as procreators. The Magdalenian divide or shift has taken away from women the spiritual dimension they had, and they only kept their knowledge about delivering children and they will remain midwives who will be turned into witches in the Middle Ages, and their knowledge of plants, hence of medicine, was turned against them, their concoctions becoming of course poisonous.

## 5./ THE CANONICAL FORMULA OF LEVI-STRAUSS

If I insisted on this ternarism of mythologies, it is because it is fundamental in the human mind, in human thinking. When something is reduced to a binary relation there is always a loss of one element. Julien d'Huy starts with a simple quotation from Claude Lévi-Strauss's 1955 contribution in the *Journal of American folklore*.[16]

---

[15] Margaret with the worm, Barbara with the tower, Catherine with the wheel, those are the three holy girls.

[16] Claude Lévi-Strauss, "The Structural Study of Myth," *The journal of American Folklore*, vol. 68, n° 270, p. 428-444

"Any myth (considered as the set of all its variants) is reducible to a canonical relation of the type: fx (a) : fy (b) :: fx (b) : fa-1 (y) (in which, two terms and two functions being given simultaneously, we assume that an equivalence relation exists between two situations where the terms and the relations are inverted, under two conditions: 1° that one of the terms is replaced by its opposite: 2° that an inversion occurs between the function value and the term value of two elements). (Lévi-Strauss, op cit., p. 442-443)"[17]

It is what Julien d'Huy calls "double twist" carried by the canonical formula. It is used to build phylogenetic trees in which the characters have three possible states (-1, 0, +1) and he implements this fact by reducing it to Claude Lévi-Strauss principle that only one is replaced by its opposite. Then he can only have four branches from one knot: (0, -1), (0, 0), (+1, 0), and (+1, +1). Mathematically a fifth branch, a fifth possibility exists but it is not taken into account by Julien d'Huy. We can wonder what this fifth branch would be when mathematically defined as (-1, -1). He gives an example of the implementation of this approach with the myth motif F40B of the myth of the Bird-Woman.

"The story of the Bird-Woman seems to be in a transformative relationship with motif F40B ("A man goes to a village of women; he must satisfy every woman against his will or a woman claims him for herself alone.") reconstructed in the previous chapter, at the time of leaving Africa… By taking up the relationships uniting motif F40B and the story of the Bird-Woman, it then becomes possible to propose the following application of the formula [canonical formula of Lévi-Strauss, MY COMMENT]: F endured marriage (husband) : F female requester (wife(ves)) :: F endured marriage (wife) : F husband - 1 (requester), which can be read: the "endured marriage" function of the husband is to the "female requester" function of the wife(ves) what the "suffered marriage" function of the wife is to the "husband - 1" function of the male requester, the male requester being married only for a limited time. [Julien d'Huy's note: F aggressive opponent (man) : F peaceful partner (women) :: F aggressive opponents (women) : F men - 1 (peaceful male spouse), which reads: the function "aggressive adversary" of the man is at the function of the "peaceful partners" of the women what the function "aggressive adversaries" of the women is to the "man - 1" function of the peaceful male spouse.] Is it possible to corroborate this transformation making the story of the Bird-Woman a continuation of motif F40B? The answer is positive if we consider that this story could transform that of the primitive matriarchy (F38), reconstructed in the previous chapter as having belonged to the same complex of stories before man's exit from Africa as F40B) … The Melusinisian[18] myth [whose structure is similar to that of the Bird-Woman] tells […] almost always the passage from a type of society dominated by women (as long as the prohibition is respected) to a type of society ruled by men.[19]

---

[17] Tout mythe (considéré comme l'ensemble de ses variantes) est réductible à une relation canonique du type : fx(a) : fy(b) :: fx(b) :fa-1(y) (dans laquelle, deux termes et deux fonctions étant donnés simultanément, on pose qu'une relation d'équivalence existe entre deux situations où les termes et les relations sont inversées, sous deux conditions : 1° qu'un des termes soit remplacé par son contraire : 2° qu'une inversion se produise entre la valeur de fonction et la valeur de terme de deux éléments). (Lévi-Strauss, op cit. p. 442-443)

[18] Melusina is a figure of European folklore and mythology, a female spirit of fresh water in a sacred spring or river. She is usually depicted as a woman who is a serpent or fish from the waist down (much like a mermaid). She is also sometimes illustrated with wings, two tails, or both. Her legends are especially connected with the northern and western areas of France, Luxembourg, and the Low Countries.

[19] Julien d'Huy, op. cit., "Le récit de la Femme-Oiseau semble en rapport de transformation avec le motif F40B (« Un homme se rend dans un village de femmes ; il doit satisfaire chaque femme contre sa volonté ou une femme le revendique pour elle seule. ») reconstruit au chapitre précédent , au moment de la sortie d'Afrique…

We could discuss the connection of these stories to the time when Homo Sapiens left Black Africa. There were several migrations, hence several times. But what I am interested in here is that if we follow the conclusions we can get from Marshack[20] and other paleolithic researchers about prehistorical women, and men, before the development of agriculture and herding, going as far back as 50,000 BCE when we have archaeological artifacts, the shift in the Magdalenian is not from a society dominated by women, but from a society in which women and men were living on a division of labor that made both sexes equally indispensable for the survival and expansion of the community, and the species, men with the spiritual ritualization of hunting and women with the spiritual ritualization of procreation, to a society dominated now by the control of land and of working this land, and men became dominant, in fact, an elite of men became dominant and they produced ideological mythology about a society dominated by women to justify their present society dominated by men, or nostalgically fantasize about the past. It will take a good 10,000 years for it to become vastly dominant in Europe, around the Mediterranean Sea, and in the Middle East. Beyond it will occur on its own timeline in each concerned region.

My point here is that we do have a shift from an equal-opportunity society to a male-dominated society, but it did not occur before leaving Black Africa, not right after. It occurred at least 35,000 years later, as of the last migration out of Black Africa (third-articulation language speaking people), but something like 100,000 years after the last but one migration out of Black Africa (second-articulation language speaking people) and not far from if not even more than 200,000 years after their leaving Black Africa (first-articulation language speaking people). The shift is connected to a change in the division of labor, and such a change could only happen when Homo Sapiens shifted from hunter-gatherer societies to agriculture-herding societies, and that happened sometime in the Magdalenian or later, according to the area in the world. We can note that slavery appeared in the same period and for the same reason: to control the workers in the fields or keeping the herds.

To conclude on this point let's quote this passage: "The *kojiki* story, therefore, did not represent a **primitive** [MY EMPHASIS] state of the myth. The polytomy grouping together the different Eurasian versions and some Amerindian versions, a set also identified thanks to the software *Structure*, pleads rather for the existence of a vast Americano-Eurasiatic

En reprenant les relations unissant le motif F40B et le récit de la Femme-Oiseau, il devient alors possible de proposer l'application suivante de la formule [canonique de Lévi-Strauss] : F épousailles subies (époux) : F demandeuse (épouse[s]) :: F épousailles subies (épouse) : F époux - 1 (demandeur), ce qui peut se lire : la fonction « épousailles subies » de l'époux est à la fonction « demandeuse » de la ou des épouse(s) ce que la fonction « épousailles subies » de l'épouse est à la fonction « époux - 1 » du demandeur, le demandeur n'étant époux que dans un temps limité. [Note de Julien d'Huy : F adversaire agressif (homme) : F partenaires pacifiques (femmes) :: F adversaires agressifs (femmes) : F hommes - 1 (conjoint pacifique), ce qui se lit : la fonction « adversaire agressif » de l'homme est à la fonction « partenaires pacifiques » des femmes de que la fonction « adversaires agressifs » des femmes est à la fonction « homme - 1 » du conjoint pacifique.] Est-il possible de corroborer cette transformation faisant du récit de la Femme-Oiseau une continuation du motif F40B ? La réponse est positive si l'on considère que ce récit pourrait transformer celui de la matriarchie primitive (F38), reconstruit dans le chapitre précédent comme ayant appartenu au même complexe de récits antérieurs à la sortie de l'homme d'Afrique que F40B)… Le mythe mélusinisien [dont la structure est similaire à celle de la Femme-Oiseau] raconte […] presque toujours le passage d'un type de société dominé par les femmes (tant que l'interdit est respecté) à un type de société gouverné par les hommes.

[20] Dr. Jacques Coulardeau, *Paleolithic Women, For Gendered Linguistic Analysis*, [Alexander Marshack – The Roots Of Civilization – Revised And Augmented Edition – 1991 – A Review], Éditions La Dondaine, Kindle format, Amazon, 2020

complex, corresponding to the "<u>**archaic**</u> [MY EMPHASIS] mythological layer" of Lévi-Strauss (*The other Face of the Moon, Writings on Japan*, Le Seuil, Paris, 2011, p. 142)"[21]

The two words in the bold underlined font are dangerous in what they convey. "Primitive" is too often understood as un-developed. The Jacques Chirac Museum in Paris has been at the center of a debate on "arts primitifs" (primitive arts) which was finally dropped for phrases like "arts primordiaux" (primordial or primeval arts) that exclusively refers to a point of origin in time. The word used by Lévi-Strauss is even worse because "archaïque" in modern French, or "archaic" in modern English, exclusively mean something backward, completely irrelevant, or non-relevant anymore. But this leads me to the last point here, contained in this quotation: the "vast Americano-Eurasiatic complex." First, Julien d'Huy is aware that the American side of this set of myths is deficient since it is reduced to "some Amerindian versions," and it is even more restrictive in French "quelques versions amérindiennes," the quantifier "quelques" meaning clearly "reduced in number" though it stops short of "restricted in number." That's the very mistake that leads him to identify a link between myths or tales in South East Asia and Melanesia on one hand, including Australia, and on the other hand, South America, but asserting later on that these myths and tales migrated (necessarily meaning the people carrying them) to Siberia to cross to Alaska, and they remained separate and uninfluenced by the other people migrating with them from Siberia and bringing in myths that are common in North or Great North America. Julien d'Huy even goes as far as to say that once in America they migrated to South America. That is not acceptable, and I think we should seriously explore the hypothesis that the Melanesian and South-East Asia people went on moving east after Australia and reached Chile around 35-30,000 BCE in Monte Verde, a place they could never have reached if they had crossed the Bering Strait around 25,000 BCE. So I will say there were, as Julien d'Huy says, three migrations to the Americas: the first one to Chile (35-30,000 BCE) and then north to South America and Mesoamerica; then the second from Siberia to Alaska (ca. 25,000 BCE) and going south to what is today North America with a meeting and mixing zone in South West USA and Northern Mexico; and finally a third one from Siberia (after the Ice Age Peak hence in Magdalenian times and later) that remained in the Canadian Great North and eventually went to Greenland. Two cultures essentially moving in different directions: one from South America going North and another one from Alaska and going south. These are the two essential cultures in the Americas if we keep the last migration restricted to the Great North and Greenland, as it seems to have been the case.

## 6./ JULIEN D'HUY AND THE AMERICAS

I will only give a quick discussion of one aspect of the book under discussion. The book is in French and will be sidetracked by many who do not speak French. That's why I include a long quotation I have translated for readers to capture the stake of this approach on this particular point which concerns the limited and faulty inclusion of Native Americans in the reasoning that remains altogether extremely Eurasia-centered, Black Africa only quoted once as "Sub-Saharan Africa," and Native Americans being seen as some kind of extreme appendage to this Eurasia-centeredness.

---

[21] « Le récit du *kojiki* ne représentait donc pas un état **primitif** du mythe. La polytomie regroupant les différentes versions eurasiatiques et quelques versions amérindiennes, ensemble également identifié grâce au logiciel *Structure*, plaide plutôt pour l'existence d'un vaste complexe américano-eurasiatique, correspondant à la « couche mythologique **archaïque** » de Lévi-Strauss (*L'Autre Face de la Lune. Écrits sur le* Japon, Le Seuil, Paris, 2011 : 142) »

In his one-page summary of the passage of various myths from out of America into the Americas, too many origins are not specified (twelve possible origins, only four specified) in this conclusive page, though some information might be scattered in the whole book to be collected by the readers. Three out of four specified origins are Oceania. One out of four specified origins is Eurasia. We all know the passage via the Bering Strait, but we also know the extreme anteriority of the archaeological site of Monte Verde in extreme South Chile with a layer, not yet open, going back to 35,000 years ago according to Steven Mithen.[22] We have to hypothesize a southern route that goes on beyond Australia (note it also goes to Madagascar that is in no way linguistically African but is connected to the Australian Aboriginal language, and it is 8,826 km away from Australia) to New Zealand (which is 9,158 kilometers away from Chile with plenty of islands in-between), New Caledonia, and then from island to island in Polynesia to Chile (the distance between Easter Island and Chile is only 3,689.06 km). They could navigate from Australia to Madagascar, so why not Chile? But that goes against the traditional western belief that the first population of Madagascar arrived at the earliest ca. 2,000 BCE, though some go back to 10,500 years ago (8,400 BCE). We have to hypothesize they could navigate in the South Pacific from one island to the next, the way they still do today from traditional learning and know-how, and they could do it before the Ice Age Peak, hence more than 22,000 years ago.
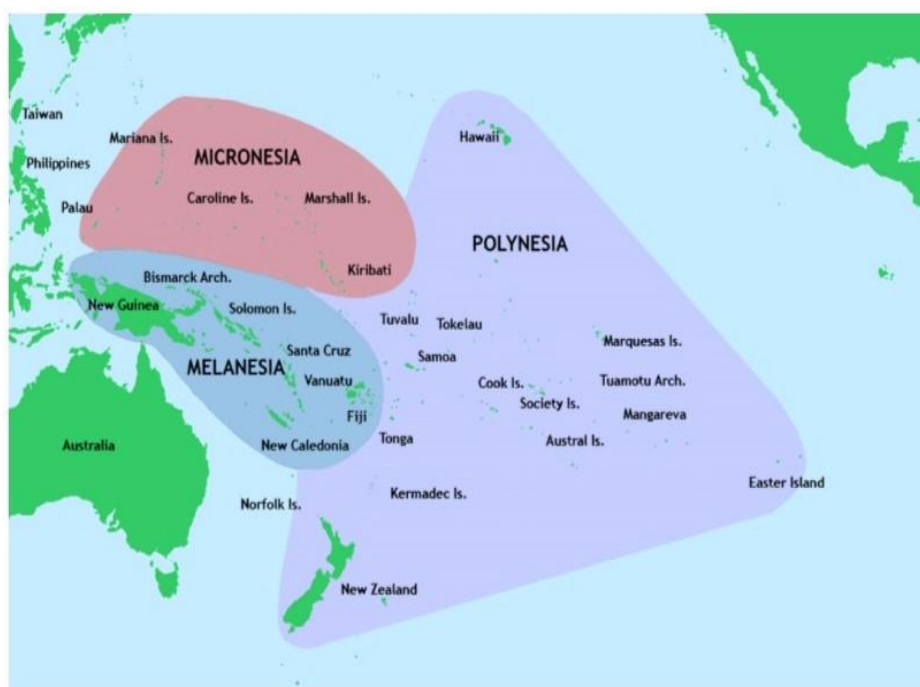


The three major cultural areas in the Pacific Ocean: Melanesia, Micronesia, and Polynesia (it actually looks like a double shafted arrow pointing East).

But Julien d'Huy yields to the dominant idea coming from North America in the wake of the Clovis Theory stating one migrating route only and all of it happening after the Ice Age Peak somewhere around 15,000 BCE, or maybe even later, a theory that anyone serious about Native Americans today considers as foreclosed and no longer valid. It is interesting to find a synthesized version of what he thinks in his conclusive chapter.

---

[22] Steven Mithen, *The Singing Neanderthals: The Origins of Music, Language, Mind and Body*, Harvard University Press, 2007; Steven Mithen, *After the Ice: A Global Human History, 20,000-5000 BC*, Harvard University Press; 2008.

"We can note that the clade uniting all the cultural areas of South America is often separated from that uniting the cultural areas of North America only by the inclusion of Melanesia and Australia, this which tends to indicate that Native American mythology of the northern hemisphere and that of the southern hemisphere share a large number of motifs.

"It is then possible to imagine a model of diffusion of myths on the continent according to the genetic data. It is known that people from northern and southeastern Eurasia met in northeastern Siberia and exchanged genes before the conquest of America. However, nothing prevents each group from retaining, at least partially, its social structure and its own mythology.[23]

[The example from Lévi-Strauss of the Mandan and the Hidatsa Indians in the Great Plains of North America that follows is badly chosen since the two tribes are of the same Siouan language and culture. Differences can be easily kept within a diversified community and it proves the Siouan people, though speaking languages that were similar did not target homogenization. But unluckily Julien d'Huy refuses to consider the languages of the people he speaks of. It is surprising that Claude Lévi-Strauss did the same mistake and considered two Siouan tribes as different enough to be opposed or at least contrasted.]

"The two populations from Siberia would then have colonized different spaces on the new continent, the groups from Southeast Asia reaching South America, and those from Northern Eurasia settling in North America, preserving thus the morphological continuity of each hemisphere. Later, a third and fourth wave would have joined in the Far North, at the origin of the Paleo- and Neo-Eskimos, who also carried their own myths.

[DNA considerations follow.]

"The case of South America is more complex. Some Amazonian peoples are found to be genetically closer to the Australian, New Guinea, and Andaman Islands groups than to any other Eurasian or Native American group. This wave of this settlement would have been the first to reach the New World. […]

"It is possible to propose a second hypothesis to explain the bipartition of mythology in America. An initial settlement by hybridized humans from both the eastern and to a lesser extent from northern Asia would have spread the same mythology from the Bering Strait to Tierra del Fuego. This migration would have been followed by another of less intensity and limited to North America, which would have brought along new mythology."[24]

---

[23] "On peut relever que le clade unissant l'ensemble des aires culturelles d'Amérique du Sud n'est souvent séparé de celui unissant les aires culturelles d'Amérique du Nord que par l'inclusion de la Mélanésie et de l'Australie, ce qui tend à indiquer que la mythologie amérindienne de l'hémisphère nord et celle de l'hémisphère sud partagent un grand nombre de motifs.
"Il est alors possible d'imaginer un modèle de diffusion des mythes sur le continent s'accordant avec les données génétiques. On sait que les populations venues du nord et du sud-est de l'Eurasie se sont rencontrées en Sibérie du nord-est et ont échangé leurs gènes avant la conquête de l'Amérique. Or rien n'empêche que chaque groupe y ait conservé, au moins partiellement, sa structure sociale et sa mythologie propre." (page 295-296)
[24] "Les deux populations venues de Sibérie auraient ensuite colonisé des espaces différents sur le nouveau continent, les groupes d'Asie du Sud-Est atteignant l'Amérique du Sud, et ceux d'Eurasie du Nord s'établissant en Amérique du Nord, préservant ainsi la continuité morphologique de chaque hémisphère. Plus tard seraient venues s'adjoindre, dans le Grand Nord, une troisième et quatrième vagues à l'origine des Paléo- et des Néo-Esquimaux qui elles aussi auraient transporté leurs propres mythes.
[Suivent des considérations ADN]

We can note the total absence of considerations on the languages of the concerned Native Americans, but also of the concerned populations in Siberia or South-East Asia. But Julien d'Huy never hypothesized in his own personal approach – when we can assume what he writes is not a reference to someone else – the fact that two vast migrations reached Asia as a whole, one around 120,000 BCE, people speaking second-articulation languages known as isolating languages, mainly of the Tibeto-Chinese group today but also of the Khmer-Birman group in South-East Asia, and a second later around 70,000 BCE, people speaking third articulation languages known as Turkic, Altaic, Uralic, Sami and some other agglutinative languages that also colonized the whole of Europe, at the time the original home of Neanderthals. And we should mention the Denisovans in Asia. These two populations from these two migrations found themselves sharing the whole of Siberia, but also Mongolia, Central Asia, and Manchuria. The concept of "métissé" that Google translates "mixed-race" which is racist since both groups are members of only one species, the human species, and that I translate "hybridized" is not realistic since still today the two linguistic communities can be found with more or less vigor for one or the other side of this fundamental bilingualism according to the countries or areas where they live. The second problem is the link between Australia, Oceania, New Guinea, Melanesia, on one side, and southern Native Americans, on the other, hence the route of the migration from this vast south Pacific area to South America, what Julien d'Huy calls the southern hemisphere including southern Africa in this set of regions, though Homo Sapiens never went out of Black Africa to these various regions east, including Madagascar, in the southern hemisphere. They always moved to what is today the Middle East and Pakistan that Julien d'Huy calls South-West Asia.

I will only add one element that Julien d'Huy never considers because he completely ignores the Mesoamerican culture represented by the Olmecs and other people older than them and still not identified, and of course their descendants, the Mayas, the Toltecs, and many others. One mention of the Aztecs is badly inspired since the Aztecs came from the north, meaning probably the South West of the USA today. If he had taken into account this most brilliant Olmec-Maya-Toltec culture or these most brilliant cultures in South and Mesoamerica,[25] he would have been obliged to completely revise what he says about the Mother Corn, the Goddess of Maize, and what's more, based on what Gudmund Hatt[26] says about it connecting Indonesia to it.

Gudmund Hatt has it wrong and couldn't have it right since the Maya writing system was not yet deciphered when he wrote his book and his later article. Julien d'Huy should

---

"Le cas de l'Amérique du Sud est plus complexe. Certains peuples amazoniens s'avèrent génétiquement plus proches des groupes d'Australie, de Nouvelle-Guinée et des îles Andaman que de n'importe quel autre groupe eurasien ou amérindien. Cette vague de peuplement aurait été la première à atteindre le Nouveau Monde. […]

"Il est possible de proposer une deuxième hypothèse pour expliquer la bipartition de la mythologie en Amérique. Un premier peuplement par des humains métissés provenant à la fois de l'est et pour une moindre part du nord de l'Asie aurait diffusé une même mythologie du détroit de Béring à la Terre de Feu. Cette migration aurait été suivie par une autre de moindre intensité et limitée à l'Amérique du Nord, qui aurait amené une nouvelle mythologie." (page 297-298)

[25] Charles C. Mann, *1491: New Revelations of the Americas Before Columbus*, Vintage, 2006; Charles C. Mann, *1493: Uncovering the New World Columbus Created*, Vintage, 2011)

[26] Hatt, Gudmund, *Asiatic Influences in American Folklore,* I kommission hos ejn Munksgaard, Kobenhavn, 1949. Hatt Gudmund, "The Corn Mother in America and in Indonesia," *Anthropos*, vol. 46, n° 5-6, p. 853-914.

have checked this detail because today we cannot ignore the Maya writing system and Maya culture anymore. Maize was developed in Mesoamerica and maybe before in Amazonia (satellite pictures show great numbers of architectural structures under the jungle), but the plant grows wild with many different species and subspecies in Mexico and probably a little more to the south. The modern plant that cannot reproduce itself at all, all by itself, was developed by the Mayas, probably the Olmecs before them and we do not know beyond before the Olmecs, except that we are not able today with all our genetic science to produce the biological evolutionary route from the wild plants to the domesticated plant. Maize is not native to any other region in the world, and the Spaniards were the agents of its spreading to Europe in the 16$^{th}$ century and to Asia with their halfway commercial harbor in the Philippines where they met with Chinese merchants to sell their goods, the Chinese selling cloth, silk, etc., and the Spaniards selling silver, and various crops like corn, sweet potatoes, and other beans, squashes, tobacco, etc. And that happened only in the 17$^{th}$-18$^{th}$ centuries, certainly not before. By then Native American populations had been reduced by 75% and enslaved in one way or another into the missionary colonial world of Spain, Portugal, France, and not-missionary-at-all England.

He would thus have come to the famous Mayan and other Maize God who is a man and the central piece of the Hero Twins' adventures in the *Popol Vuh*. That would have led him to wonder why twins are Hero Twins all over Mesoamerica, who bring the Maize God back to life, but when the Aztecs arrived one millennium at least later in Mexico they rejected twins, and when twins were born, the parents killed one because twins were no heroes whatsoever for the Aztecs but a very bad omen.

There sure is a lot of work left to do in this direction and linguistics is crucial, will be crucial. I guess the Russians, Yuri Berezkin, and his followers like Julien d'Huy and his own master Jean-Loïc Le Quellec,  will have to relearn the language policy of Vladimir Lenin, Valentin Voloshinov, Mikhail Bakhtin, and Lev Vygotsky, that they seem to have forgotten, without forgetting the world-leading role in the deciphering of Maya language, Maya writing system, and Maya culture of Yuri Valentinovich Knorozov, a professor at the University of Leningrad for several decades. This research is proof that it will never be finished, and we will always have some more to discover, hypothesize, and I hope not too much theorize. Theories tend to ossify into dogma, like this concluding remark by Julien d'Huy on the last but one page of the main text of his 384-page book:

"If we agree on the basic entity – the mythological type we are referring to – the veracity of my version cannot be objectively contradicted by my speaker, but only dialogically, through the selection of the traits that I retain which differ from those he himself retained."

The point is this sentence seems to mean that if we do not accept what the author states as a possible explanation, we have no right to question what he says and to suggest some very basic elements are wrong and should be reconsidered from a different perspective. I mean particularly the question of languages and the question of the migrations out of Black Africa to finally consider the Afro-Asiatic or Semitic migration out of Black Africa to Egypt, Northern Africa, and Saharan Africa. And this migration out of Black Africa would only leave Africa for the Middle East around 35,000 years ago when all the other migrations out of Black Africa would have been finished for at least 20,000 years.

**CONCLUSION**

Julien d'Huy's book is great science and as such is worth considering, discussing, enriching, and assimilating in our own research. Quite different is Y.N. Harari.[27] The first book may seem to be historical, but the second is just plain dystopia in the form of a scientific-looking utopia similar to Ray Kurzweil's approach.[28] But I will expand a little bit on Y.N. Harari. For him, Homo Sapiens never spoke/speaks, and he only considers humanity after the last migration out of Black Africa (70,000 BCE).

He defines dataism, his fifth stage of human history, the dataist revolution, as the full merging of humanity in ONE data processing system, the Internet-of-all-things. Then the conclusion is absolute:

"Once this mission is accomplished, Homo Sapiens will vanish." (*Homo Deus, p.*443)

Humanity has moved from a deocentric vision to a homocentric conception and finally to a data-centric logic. That sounds like a nightmare. On his last page, his last words are **three interlinked processes** and **three key questions**. First, **the three processes**:

☐ Science is converging on an all-encompassing dogma.

**,** Intelligence is decoupling from consciousness.

ƒ Non-conscious highly intelligent algorithms will know us better than we know ourselves.

And then, **the three key questions**:

Œ Are organisms just algorithms?

☐ What's more valuable—intelligence or consciousness?

Ž What will happen to society, politics, and daily life when non-conscious highly intelligent algorithms know us better than we know ourselves?

This last question sends us back to the three processes like the last sentence of the seventh and last volume of Stephen King's initial series of novels *The Dark Tower* is the very same first sentence of the first volume. There is no freedom, just adventure in a programmed world where we have absolutely no say as for the end target of this adventure which sounds more and more like a Virtual Reality game.

This kind of ideological campaign is only possible as a propaganda-dogma because it negates the heart of man's cognition and evolution, the couple MIND/LANGUAGE that both develop from man's physiological mutations naturally selected to make Homo Sapiens a fast bipedal long-distance runner, the only chance he had to survive 300,0000 years ago. In this survival battle, Homo Sapiens had to develop the communication he inherited from his ancestors, Homo Ergaster, and progressively integrate the communicational situation of his as the syntax of his communication. The phylogeny of his articulated languages dictates the three phases leading to the full integration of the communicational syntax in the langues[29] of

---

[27] Harari, Yuval Noah, *Sapiens, A Brief History of Humankind*, London, Vintage, 2011. Harari, Yuval Noah, *Homo Deus, A Brief History of Tomorrow*, London, Vintage, 2015

[28] Kurzweil, Ray, *The Singularity is Near: When Humans Transcend Biology*, New York, Viking, 2005

[29] « La langue, toute langue, est dans son ensemble un vaste système d'une rigoureuse cohérence, lequel se recompose de plusieurs systèmes reliés entre eux par des rapports de dépendance systématique qui font de leur assemblage un tout. » (Gustave Guillaume, *Principes de Linguistique Théorique*, Klincksieck, Paris & Les Presses de l'Université Laval, Québec, Canada, 1973, p. 176) "Language, any language, as a whole is a vast system of rigorous coherence, which is in its turn composed of several systems linked to one another by relationships of systemic dependence which make their assembly into a whole. » (Annie Boone & André Joly, *Dictionnaire Terminologique de la Systématique du Langage*, L'Harmattan, Paris, 1996)

his languages. The "langue" of a language is the mental virtual system of systems that command the architecture of the language and the production of any discourse in this language.

Along the way, the migrations out of Black Africa produced three vast families of languages with minimally, then partially and further on maximally integrated communicational syntax into langue with a conceptualized discursive syntax inversely proportional to the syntax integrated into langue.

Man is thus not an algorithm because his mind/language can develop constantly and new machines (he has invented and will invent) will produce changes in his mind and his language (individual and collective) that will enable him to keep control of these machines. Y. N. Harari seems to forget that man is an autonomous self-learning organism that is a lot more powerful as for that than any machine he has so far invented and will invent. There surely is a challenge in this stake but so far humanity has always been able to solve even its worst possible challenges.

At least Julien d'Huy is the proof and hard evidence that Homo Sapiens has always been creative and up to his task to survive and some may say his mission to survive. Did his/her/their at least 300,000 years of history prove our phylogenetic nature contains our future in its deep recesses and cerebral folds? Predestined to perdition? Probably not. But predisposed to be creative? Definitely. That's what is good in Julien d'Huy and that's what is alienated in Yuval Noah Harari.

**BIBLIOGRAPHY:**
[1]   ---, *The Dresden Codex: Full-Color Photographic Reproduction*, CreateSpace Independent Publishing Platform (January 23, 2015), ISBN-13: 978-1507685877

[2]   Bakhtin, M.M. (1929) Problems of Dostoevsky's Art, (Russian) Leningrad: Priboj.

[3]   Bakhtin, M.M. (1963) Problems of Dostoevsky's Poetics, (Russian) Moscow: Khudozhestvennaja literatura.

[4]   Bakhtin, M.M. (1968) Rabelais and His World. Trans. Hélène Iswolsky. Cambridge, MA: MIT Press.

[5]   Bakhtin, M.M. (1975) Questions of Literature and Aesthetics, (Russian) Moscow: Progress.

[6]   Bakhtin, M.M. (1979) [The] Aesthetics of Verbal Art, (Russian) Moscow: Iskusstvo.

[7]   Bakhtin, M.M. (1981) The Dialogic Imagination: Four Essays. Ed. Michael Holquist. Trans. Caryl Emerson and Michael Holquist. Austin and London: University of Texas Press.

[8]   Bakhtin, M.M. (1984) Problems of Dostoevsky's Poetics. Ed. and trans. Caryl Emerson. Minneapolis: University of Minnesota Press.

[9]   Bakhtin, M.M. (1986) Speech Genres and Other Late Essays. Trans. Vern W. McGee. Austin, Tx: University of Texas Press.

[10] Bakhtin, M.M. (1990) Art and Answerability. Ed. Michael Holquist and Vadim Liapunov. Trans. Vadim Liapunov and Kenneth Brostrom. Austin: University of Texas Press [written 1919–1924, published 1974-1979]

[11] Bakhtin, M.M. (1993) Toward a Philosophy of the Act. Ed. Vadim Liapunov and Michael Holquist. Trans. Vadim Liapunov. Austin: University of Texas Press.

[12] Bakhtin, M.M. (1996–2012) Collected Writings, 6 vols., (Russian) Moscow: Russkie slovari.

[13] Bakhtin, M.M., V.D. Duvakin, S.G. Bocharov (2002), M.M. Bakhtin: Conversations with V.D. Duvakin (Russian), Soglasie.

[14] Bakhtin, M.M. (2004) "Dialogic Origin and Dialogic Pedagogy of Grammar: Stylistics in Teaching Russian Language in Secondary School". Trans. Lydia Razran Stone. Journal of Russian and East European Psychology 42(6): 12–49.

[15] Bakhtin, M.M. (2014) "Bakhtin on Shakespeare: Excerpt from 'Additions and Changes to Rabelais'". Trans. Sergeiy Sandler. PMLA 129(3): 522–537.

**[16]** Boone Annie & Joly André, *Dictionnaire Terminologique de la Systématique du Langage*, Lharmattan, Paris, 1996

**[17]** Coe, Michael D. & Van Stone, Mark, *Reading the Maya Glyphs*, Thames and Hudson, New York, 2001

**[18]** Coulardeau, Dr. Jacques, Ivan EVE, *Cro-Magnon's Language: Emergence of Homo Sapiens, Invention of Articulated Language, Migrations out of Africa* , Format Kindle, Éditions La Dondaine, 2017

**[19]** Coulardeau, Dr. Jacques, *Paleolithic Women, For Gendered Linguistic Analysis*, [Alexander Marshack – The Roots Of Civilization – Revised And Augmented Edition – 1991 – A Review], Éditions La Dondaine, Kindle format, Amazon, 2020

**[20]** Díaz Gisele, Rodgers, *The Codex Borgia: A Full-Color Restoration of the Ancient Mexican Manuscript*, Dover Fine Art, History of Art, Dover Publications, 1993

**[21]** d'Huy, Julien, *Cosmogonies, La Préhistoire des mythes*, La Découverte, Paris, 2020

**[22]** Guillaume Gustave, *Principes de Linguistique Théorique*, Klincksieck, Paris & Les Presses de l'Université Laval, Québec, Canada, 1973

**[23]** Harari, Yuval Noah, *Sapiens, A Brief History of Humankind*, London, Vintage, 2011.

**[24]** Harari, Yuval Noah, *Homo Deus, A Brief History of Tomorrow*, London, Vintage, 2015

**[25]** Hatt, Gudmund, *Asiatic Influences in American Folklore,* I kommission hos ejn Munksgaard, Kobenhavn, 1949.

**[26]** Hatt, Gudmund, "The Corn Mother in America and in Indonesia," *Anthropos*, vol. 46, n° 5-6, 1951, p. 853-914.

**[27]** Jakobson, Roman Osipovich, *Essais de Linguistique Générale,* translation Nicolas Ruwet, Éditions de Minuit, Paris.

**[28]** Knorozov, Yuri Valentinovich, La antigua escritura de los pueblos de America Central. Mexico City: Fondo de Cultura Popular. 1954.

**[29]** Knorozov, Yuri Valentinovich, Sistema Pis'ma Drevnih Mayya. Moscow: Institut Etnografii, Akademiya Nauk SSSR. 1955.

**[30]** Knorozov, Yuri Valentinovich, Diego de Landa: Soobshchenie o delah v Yukatane, 1566. Moscow: Akademiya Nauk SSSR. 1956. (Knorozov's doctoral dissertation)

**[31]** Knorozov, Yuri Valentinovich, Pis'mennost' Indeytsev Mayya. Moscow-Leningrad: Institut Etnografii, Akademiya Nauk SSSR. 1963.

**[32]** Knorozov, Yuri Valentinovich, Tatiana Proskouriakoff, ed. (1967). "The Writing of the Maya Indians". Russian Translation Series 4. Sophie Coe (trans.). Cambridge MA.: Peabody Museum of Archaeology and Ethnology.

**[33]** Knorozov, Yuri Valentinovich, Ieroglificheskie Rukopisi Mayya. Leningrad: Institut Etnografii, Akademiya Nauk SSSR. 1975.

**[34]** Knorozov, Yuri Valentinovich, Maya Hieroglyphic Codices. Sophie Coe (trans.). Albany NY.: Institute for Mesoamerican Studies. 1982.

**[35]** Knorozov, Yuri Valentinovich, "Compendio Xcaret de la escritura jeroglifica maya descifrada por Yuri V. Knorosov". Promotora Xcaret. Mexico City: Universidad de Quintana Roo. 1999.

**[36]** Knorozov, Yuri Valentinovich, Stephen Houston; Oswaldo Chinchilla Mazariegos; David Stuart, eds. (2001). "New data on the Maya written language". The Decipherment of Ancient Maya Writing. Norman OK.: University of Oklahoma Press. pp. 144–152.

**[37]** Kurzweil, Ray, *The Singularity is Near: When Humans Transcend Biology*, New York, Viking, 2005

**[38]** Lawrence, D.H., *The Plumed Serpent* , Vintage; Reissue edition, 1992.

**[39]** Lenin, Vladimir, *Lenin on Language*, Raduga Publishers, Moscow, 1983

**[40]** Lévi-Strauss, Claude, "The Structural Study of Myth," *The journal of American Folklore*, vol. 68, n° 270, 1955, p. 428-444

**[41]** Lévi-Strauss, Claude, *Anthropologie* Structurale, Plon, Paris, 1958

**[42]** Lévi-Strauss, Claude, *L'Autre Face de la Lune. Écrits sur le* Japon, Le Seuil, Paris, 2011

**[43]** Mann, Charles C., *1491: New Revelations of the Americas Before Columbus*, Vintage, 2006.

**[44]** Mann, Charles C., *1493: Uncovering the New World Columbus Created*, Vintage, 2011)

**[45]** Mithen, Steven, *The Singing Neanderthals: The Origins of Music, Language, Mind and Body*, Harvard University Press, 2007

**[46]** Mithen, Steven, *After the Ice: A Global Human History, 20,000-5000 BC*, Harvard University Press; 2008.

**[47]** Montgomery, John, *Dictionary of MAYA hieroglyphs*, Hippocrene Books, New York, 2002, free access

athttp://www.famsi.org/mayawriting/dictionary/montgomery/index.html#:~:text=John%20Montgomery's%20Dictionary%20of%20Maya,part%20of%20speech%2C%20and%20meaning.

**[48]** O'Halloran, **Kay L.,** Tan, **Sabine, and** Wignell, **Peter**, "Intersemiotic Translation as Resemiotisation: A Multimodal Perspective," in *Signata*, 7 | 2016, 199-229.

**[49]** Voloshinov, Valentin Nikolaevich, *Marxism and the Philosophy of Language*, 1929, Chapter 1: The study of Ideologies and Philosophy of Language; Chapter 2: Concerning the Relationship of the Basis and Superstructures, *Marxism and the Philosophy of Language*, Seminar Press, in liaison with the Harvard Univerity Press and the Academic Press Inc., 1973. One section reproduced under "Fair Use." Transcribed: by Paul Lamplugh. https://www.marxists.org/archive/voloshinov/1929/marxism-language.htm

**[50]** Vygotsky, Lev, *Pensée Et* Langage, Messidor, 1985, SNEDIT LA DISPUTE, 1997, ISBN-13 : 978-2843030048

# PERCEIVED BENEFITS OF ONLINE LECTURES DURING THE PANDEMIC: A CASE STUDY IN ENGINEERING EDUCATION

**Valentina Iuliana MANEA[1], Tudor MACAVEI[1], Costin PRIBEANU[2]**
[1] Technical University of Building Engineering, Bucharest, Romania
[3] Academy of Romanian Scientists, Bucharest, Romania
E-mail: vmanea@yahoo.ro, tudor‑mac@yahoo.com, costin.pribeanu@gmail.com

## ABSTRACT
*The educational process changed significantly in the context of the pandemic generated by the Coronavirus. University students had to move from the traditional classes and laboratories to the online platform. As extant research shows, this shift to online education has both advantages and drawbacks. The objective of this research is to analyze the advantages of online lectures as perceived by engineering students from a Romanian technical university in Bucharest. The analysis has been done on a sample of 109 university students. The results revealed two kinds of benefits: educational and personal. The most important educational benefits were the online participation and the possibility to record and review courses or seminars any time and from anywhere. The most important personal benefits were time-saving, comfort, and money-saving. Overall, the perceptions of engineering students are suggesting a relative acceptance of the online lecture format which contrasts with the results of similar studies in the literature.*
**Keywords:** *online lectures; pandemic; online educational platform; learning from home;*

## INTRODUCTION
The educational process changed significantly in the context of the pandemic generated by the Coronavirus COVID-19. The mobility restrictions forced universities to move from traditional teaching and learning activities to fully online education. Online education has been researched for decades and has proved to provide many benefits: access any time and from any location, up-to-date learning materials, and effective group work (Ally, 2004; Graham et al., 2004; Anderson, 2011). However, online education was not mandatory and not the only way to teach and learn. Rather, it was mainly perceived as a complement to traditional education and a useful solution for individual study and group work.

This unexpected change that forced people to stay home is affecting both teachers and students and has an impact on both university and personal life. As extant research shows, this shift from conventional to online education in the coronavirus context has both advantages and drawbacks. From the one hand, is appreciated the access to learning support, skills development, comfort, time, and location flexibility (Dhawan, 2020, Mishra et al., 2020; Sun et al., 2020). On another hand, students complained about the lack of socialization, lack of face-to-face interaction with the teacher, distraction, stress, and technical issues (Adnan & Anwar, 2020; Dhawan, 2020; Li et al., 2021).

Online education during the pandemic crisis created both challenges and opportunities for universities which require efforts to adapting the educational system to better serve the needs of learners (Adedoyin & Soikan, 2020; Rapanta et al., 2020; Toquero, 2020; Unger & Meiran, 2020). The first step towards such measures is to know and better understand the needs of university students.

The objective of this research is to analyze the advantages of online lectures as perceived by students from the Technical University of Building Engineering in Bucharest. The term online lectures refer to a variety of educational activities such as courses, seminars, and debates. The approach is based on qualitative analysis of students' opinions (N=109) as regards the advantages of online lectures.

The rest of this paper is structured as follows. Some related work is discussed in the next section. The method and sample are presented in section 3. The next section presents and discusses the results of the study. The paper ends with a conclusion in section 5.

## 1. RELATED WORK

Adedoyin & Soycan (2020) studied the opportunities and challenges of online learning that were brought in front in the context of pandemic crisis-response of higher education institutions all over the world. They argued that if challenges will be transformed into opportunities, online learning could become more hybrid and gain in sustainability.

Sun et al. (2020) discussed the results of a test targeting online teaching in China and found positive aspects such as continuity of education by attaining most of the teaching objectives, positive energy brought by teachers during classes. On the negative side, students mentioned unstable network speed, a noisy environment, and lack of professional equipment. The authors suggest that teachers should be more innovative in preparing online lessons and stimulating students' engagement by combining presentations with question & answer sessions, tests, and open discussions.

The study of Dhawan (2020) mentioned some teaching strategies that may strengthen the effectiveness of online teaching and learning: lectures, case studies, debates, discussion, experiential learning, brainstorming sessions, games. He underlined the fact that since in emergencies online education is a necessity, not an option, the quality of online teaching and learning is crucial.

Rapanta et al. (2020) proposed a design of online learning activities that are based on the combination of social, cognitive, and facilitatory presence. Cognitive presence refers to how teachers consider students' preparedness to participate. Social presence refers to the social communication channels that are opened by the teacher to maintain student-teacher and student-student interaction. Facilitatory presence refers to teachers' discourse, tools, resources, and mentoring.

The study of Toquero (2020) analyzed the opportunities and challenges for the higher education system in the Philippines during the pandemic. She argued for the migration of courses to an online environment and training of teachers to improve their digital skills and the online-centered planning, implementing and evaluating the academic performance of students. Coman et al. (2020) analyzed online teaching and learning in two universities from Romania (N=762) and concluded that Romanian higher education institutions were not prepared for an exclusive online education. They found that students' perceptions differ in many respects, such as time, appropriateness of the online environment, difficulties of online learning, and difficulties to present their work online. According to the authors, the perceived ease of use and perceived usefulness of the platform are not enough to explain the

students' acceptance of an exclusive online system. Coman et al. (2020) suggested that an exclusive online acceptance should be evaluated by taking into consideration several external factors such as the online platform provided by universities, teachers' skills and teaching style, and the technical conditions of students.

Recently, Rus et al. (2021) analyzed students' perceptions (N=120) of online courses and found that the presence is higher and the flexibility is greater. They also found that in the case of this sample, for most of the students the technical conditions from home (internet and computer) are satisfying the requirements of online learning.

## 2. METHOD AND SAMPLE

### 2.1 Sample

To understand how students perceive the online lectures during the pandemic, a questionnaire has been administrated to students from the Technical University of Building Engineering in Bucharest that include some general questions, several statements to be evaluated on a 5-points Likert scale, and several open-ended questions. This study is focusing on two open-ended questions that refer to the perceived advantages of online lectures and examples of suitable use.

A number of 110 students answered the questionnaire. One observation has been eliminated for incomplete data thus remaining 109 observations (67 male students / 42 female students) out of which 101 undergraduates and 8 master students. Students are enrolled in civil engineering (62), railways, roads, and bridges engineering 26), urban engineering and regional development (12), and project management (9).

All students participating in the study are using the platform Microsoft Teams.

### 2.2 Method

This research is a qualitative study, part of a larger study that is targeting the subjective perceptions of students about online education. This work aims to answer one research question: what are the advantages of online lectures?

The answers to the two open-ended questions have been analyzed to extract keywords then grouped on categories and topics. A total number of nine topics have been identified, out of which five are educational topics (review recorded lectures, better access to educational resources, better participation, improved learning, and improved communication), and four are personal topics (comfort, time-saving, money-saving, and health). From the total of 109 respondents, 8 didn't mention any advantage while 21 mentioned four or more advantages of online lectures. The rest of the students mentioned one (24), two (38), and three (18) advantages. Overall, a number of 249 advantages of online lectures have been identified.

## 3. RESULTS

### 3.1 Educational advantages of online lectures

Based on the answers of students, a total of 138 educational advantages of the online lectures have been identified that are synthesized in Table 1.

The most frequently mentioned educational advantage is the possibility to record courses and seminars that could be then reviewed at any time and as often as needed: "an advantage since courses and explanations could review", "courses are recorded and if I couldn't participate I don't lose anything", "most important advantage is the access to the recorded course", "lectures are recorded which makes it easier to review the content of a discipline".

*Table 1. Educational advantages of online lectures (N=109)*

| Category / Advantage | Number | Percent |
|---|---|---|
| **Review recorded lectures** | **42** | 30.43% |
| Available at anytime | 26 | |
| Useful for clarification and learning | 12 | |
| Possibility of repeated review | 6 | |
| **Better access to educational resources** | **31** | 22.46% |
| Available at any time from anywhere | 11 | |
| More and updated information | 9 | |
| All info and materials in one place | 7 | |
| Easy access | 4 | |
| **Better participation** | **30** | 21.74% |
| Participation from anywhere | 22 | |
| Being present in time | 6 | |
| Regular participation | 2 | |
| **Improved learning** | **23** | 16.67% |
| More effective learning | 14 | |
| Improved abilities and performance | 8 | |
| Learning anywhere | 1 | |
| **Improved communication** | **12** | 8.70% |
| With teachers | 4 | |
| With colleagues | 3 | |
| In general (unspecified) | 5 | |
| **Total** | **138** | 100.00% |

Students appreciated that recording lectures help understanding and learning: "it is helpful to review courses and seminars that we missed or didn't understand", "we can review when we learn for exams", "lectures could be reviewed several times, especially for those having a chaotic program or a learning at a second faculty", "courses and seminars ar at hand anytime", "we can visualize recording to understand better", "if we want we could review a chapter we missed", "in face-to-face participation if you missed a phrase, the understanding is not complete".

Another important advantage is the better and easier access to the educational materials on the platform (course support, additional materials, presentations, videos). Students liked the access to resources: "facilitates distance learning, I can connect from work", "you have at hand all the materials you need", as well as the more and updated available information: "all information needed is stored in one place", "for me online lectures are an advantage since I can access more information from anywhere", "the fact that we have access to more learning materials".

Online participation was also positively evaluated by students. They liked the possibility to participate from anywhere: "I can participate at courses from any location", "I can participate without going to university", "easier to participate, you need only to connect", "it offers mobility, I can be present at lectures from anywhere". Another advantage of online participation is related to the presentation of projects: "projects are easier to present", "we don't need to go to faculty to present our projects".

Many students considered that online lectures improve learning: "online lectures make sense, these are more attractive and easy", "learning in the online environment is easier", "online lectures are more efficient", "more detailed explanations for practical

works", "more learning possibilities". Online lectures are good for the development of abilities: "my cognitive abilities developed better than in class", "advanced digital abilities".

Online lectures are also improving the communication with teachers and colleagues: "can communicate easier with the teacher when don't understand the lesson or an exercise", "the communication between students is more efficient and occurs more frequently than in the physical environment", "collaboration with colleagues since we can create groups", "possibility to contact the teacher more quickly".

### 3.2 Personal advantages

Based on the answers of students, 138 personal advantages of online lectures have been identified that are synthesized in Table 2.

The most frequently mentioned benefit of online lectures is related to time. Students have more time since they don't need to go to university: "the time spent for travel – 3 hours daily", "the time which is very important in a student's life", "I have more free time since the travel from home to faculty is long". The time saved could be used for other activities: "we can save time for other activities" and students found it easier to manage the time: "online lectures help to balance the work between university and job".

Learning from home has been found more comfortable, for many reasons. Students no longer need to wake up early in the morning and prepare for travel: "we no longer wake up at 6 in the morning", "an advantage is a fact that we no longer prepare for faculty", "the fact that I wake up later to participate at lectures". Learning from home is more comfortable since students are more relaxed: and the environment is quiet: "the noise in class was distracting, at home, I no longer have this problem", "the advantage is the comfort from home", "there is no background noise as in the class".

An advantage mentioned by many students is reduced expenses for travel and rent: "we save the money for rent", "we spend less money", "money for rent, food", "students spend less money if they learn from home", "saving as regards rent and public transportation", "less money spent, more time saved", "we save time and money".

*Table 2. Personal advantages of online lectures (N=109)*

| Category / Advantage | Number | Percent |
|---|---|---|
| **Save time** | **46** | 41.44% |
| More free time (no travel) | 27 | |
| Time for other activities | 15 | |
| Flexible time | 4 | |
| **Comfort** | **33** | 29.73% |
| From home | 14 | |
| No wake up early, prepare, and travel | 7 | |
| More freedom, more relaxed | 7 | |
| Quiet space, comfortable | 5 | |
| **Save money** | **20** | 18.02% |
| Unspecified | 10 | |
| Rent expenses | 7 | |
| Travel expenses | 3 | |
| **Health** | **12** | 10.81% |
| Covid-19 risks | 9 | |
| Mental health | 3 | |
| **Total** | **111** | 100.00% |

Last but not least, students mentioned that learning from home is good for health and safety during the pandemic: "safety for health reasons", "avoiding public transportation", "protection for you and people around you", "helps saving money, time, physical and mental effort".

### 3.3 Discussion

In an order of frequency, the most important benefits of online lectures were the saving of time (18.47%), the possibility to review recorded courses and seminars (16.87%), the comfort of working from home (13.25%), the access to educational resources (12.45%), and the possibility to participate at online lectures from anywhere (12.05%). These five categories of benefits are accounting together for more than 73% from the total.

The most important benefits are related to two concepts: online platform and learning from home. The online platform makes possible synchronous access to online lectures from anywhere and asynchronous access to recorded lectures and additional educational content at any time and from anywhere. Learning from home is more comfortable, safer during the pandemic, saves time, and saves money.

Overall, the results show a relatively high acceptance of online classes and highlight many advantages versus traditional classes. The results of this study should be understood in the context of a technical university having many students that are not from Bucharest and also many students having a job in parallel. Another specific aspect is related to the curricula. Civil engineering students have many project assignments which, in the traditional education context require delivery on paper support and presentation in the class. Presenting online has been perceived by many of them as an advantage in terms of time, money, and commodity.

A recent internal survey has been conducted in the university that included 2473 students from all faculties. The question was "Which is your preference for the educational activities in the second semester of 2021?". The preliminary results show that 66.80% prefer the online format, 22.40% the traditional format, and 10.80% a hybrid format. These results are consistent with the results of this study but are sharply contrasting with the results of other studies that suggest a rejection of the exclusive online learning format (Coman et al., 2020, Unger & Meiran, 2020).

Meantime, the perceived advantages in terms of more and better organized educational resources, as well as the examples where online education works better, are revealing some shortcomings of the existing support for online learning and thus are challenging educators to take corrective actions for the future.

It seems that for engineering students, a hybrid online learning (blended learning) system that combines face-to-face with online learning would be the best way after the pandemic crisis. This solution has been mentioned by many authors as a future direction in education (Graham, 2006; Adedoyin & Sycan, 2020; Triyason et al., 2020). In this respect, knowing and understanding students' opinions provide suggestions on how to improve the existing online learning platforms.

## 4. CONCLUSION

The mobility restrictions during the pandemic forced the educational system to migrate from traditional classes to exclusive online classes. This change challenged teachers and students to adapt in real-time to the new teaching and learning context. The online educational platform that was previously used as additional learning support became the new

educational space hosting synchronous activities such as courses, seminars, debates, and interaction as well as asynchronous learning activities. The analysis of students' perceptions as regards the benefits of online lectures revealed both challenges for a better crisis-response and opportunities for future improvements of the educational system.

## BIBLIOGRAFY:

[1] Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: the challenges and opportunities. *Interactive Learning Environments*, 1-13.

[2] Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Online Submission*, 2(1), 45-51.

[3] Ally, M. (2004). Foundations of educational theory for online learning. *Theory and practice of online learning*, 2, 15-44.

[4] Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10(3), 16-25.

[5] Anderson, T. (2004). Towards a theory of online learning. *Theory and practice of online learning*, Chapter 2, 109-119.

[6] Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, 12(24), 10367.

[7] Dhawan, S. (2020). Online learning: A panacea in the time of the COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22. https://doi.org/10.1177/0047239520934018.

[8] Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs*, 3–21). San Francisco: Pfeiffer.

[9] Graham, C. R., & Misanchuk, M. (2004). Computer-mediated learning groups: Benefits and challenges to using group work in online learning environments. In *Online collaborative learning: Theory and practice*, 181-202. IGI Global.

[10] Hrastinski, S. (2019). What do we mean by blended learning?. *TechTrends*, 63(5), 564-569.

[11] Mishra L, Gupta T, Shree A (2020) Online teaching-learning in higher education during lockdown period of COVID-19 pandemic, *International Journal of Educational Research Open*, Volume 1, https://doi.org/10.1016/j.ijedro.2020.100012.

[12] Rapanta, C., Botturi, L., Goodyear, P. et al. (2020) Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity. *Postdigit Sci Educ* 2, 923–945. https://doi.org/10.1007/s42438-020-00155-y.

[13] Sandu, M. L., Rus, M., Salceanu, C., Tasente, T. (2021). Student perception of online education supported in the Covid-19 period. *Technium Social Sciences Journal*, 15(1), 71–79. https://doi.org/10.47577/tssj.v13i1.947.

[14] Toquero, C. M. (2020). Challenges and Opportunities for Higher Education Amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research*, 5(4), 1-5.

[15] Triyason, T., Tassanaviboon, A., & Kanthamanon, P. (2020, July). Hybrid Classroom: Designing for the New Normal after COVID-19 Pandemic. In *Proceedings of the 11th International Conference on Advances in Information Technology*, 1-8.

[16] Unger, S., & Meiran, W. R. (2020). Student attitudes towards online education during the COVID-19 viral outbreak of 2020: Distance learning in a time of social distance. *International Journal of Technology in Education and Science* (IJTES), 4(4), 256-266.

# IMPACT OF THE COVID-19 PANDEMIC ON EDUCATION AND TRAINING

**Anamaria BURADA,**

PhD. Student, Doctoral School of Humanitas Sciences- "Ovidius" University of Constanta, Romania,

E-mail:  anamaria_burada@yahoo.com

**ABSTRACT**

*This article aims at presenting how the Covid-19 pandemic affected all areas of education in 2020, at all types and levels, from early to adult education as well as the reaction of European countries and institutions through the adopted educational policies. Education and training contribute decisively to the well-being and personal and professional development of citizens as well as to the resilience of the society and of the economy, having an important role in the recovery of societies.*

**Keywords:** *Covid-19;  education; educational policies; pandemic;*

## INTRODUCTION

In the context of the Covid-19 virus pandemic, forcing schools around the world to move to virtual classrooms has raised the issue of the sustainability of this process among education experts, who are trying to build the future of online education for years to come. During this period of 2020, March-December, major changes took place in terms of the way we teach, communicate, learn, collaborate in the education and training process, with a major impact on all students, teachers, trainers, all types and all levels of education and training, from early education to adult education.

The term school as presented in this paper refers to all types of formal and non-formal educational institutions, at all levels of education, training, vocational, retraining institutions, non-formal education centres, adult education centres. The reopening of schools refers to the physical space for students and teachers in the schools that reopen as well as the entire educational process as it is known, prior to the period marked by the Covid-19 pandemic.

## 1. ONLINE, REMOTE AND BLENDED LEARNING

Online education is considered to be of lower quality than face-to-face education, despite research proving exactly the opposite. This rush to move so many institutions online has come with the perception that online education is a compromise situation, marked by low performance as well as by a much lower than expected efficiency.

However, a distinction must be made between e-learning and remote learning (Malcolm Brown, manager of the e-learning initiative education).

Malcolm Brown points out the difference between online learning and remote learning in the article "From emergency remote teaching to rigorous online learning", the first being planned and organized, while the second refers mainly to the use of technology in order to perform tasks designed for teaching in class. Remote teaching in emergency

situations or remote learning refers to the sudden transition from learning in a classroom, physical spaces to learning in virtual classes, with specific functionalities and organizations.

Remote learning it is defined as the education offered to remote students without the usual face-to-face contact with a teacher in the classroom, with the support of television and online materials and programmes.

Online learning it is considered the education that takes place on the internet, part of remote learning programmes and can complete the teaching carried out in the classroom.

Blended learning combines face-to-face teaching and learning with the use of educational technology applications and students' interactions with online learning, helping them to achieve their learning goals.

Remote learning is compared to any other form of teleworking. The activity that normally takes place in real time is moved online, using applications and online collaboration platforms such as Cisco Webex, Zoom, Microsoft Teams, Google Meet for synchronous meetings and Google Classroom, Drive for teaching asynchronous materials. On the other hand, online learning involves much more planning. For a complete online university course, planning, development lasts from six to nine months (EDUCASE report).

It is interesting to note that online education is perceived as a telework activity for teachers rather than for direct beneficiaries, respectively pupils or students. This aspect can also be understood as a result of the fact that the standardised and organized work activity is specific to adults, unlike minors whose main formative activity is education.

Also, Kelvin Thompson, executive manager of the Centre for Distributed Learning, which has been offering online courses for 24 years, claims that 85% of students choose at least one online course, which is why a lot is invested in their infrastructure.

## 2. INTERNATIONAL AND NATIONAL EDUCATIONAL POLICIES

In the UNICEF Publication "Creating resilient education systems in the context of the Covid-19 pandemic. Considerations for local and school establishment decision makers" is argued that the resilience of education systems diminishes the impact of the pandemic on learning in the context of school closures. However, this has aggravated existing social inequities.

Schools are not only a place for academic education but also for learning social and emotional skills, for social interaction, challenging teachers, principals and those in charge with the education system and decision makers, local authorities or education administrations, ministries, national agencies and other relevant stakeholders in education, to find solutions for quality inclusive education. Thus, schools represent micro-social climates, with clear dimensions in which those present participate as exponents of the values they find in the family and also exercise various social roles and statuses, in a process of formation and transformation of personality. All the more so, the didactic staff, whether they are teachers or principals, managers of school organizations, counsellors and psychologists, have a particularly important impact in guiding the younger generations in terms of their development but also in the formation of their personality.

In Romania, although the National Education Law mentioned since 2011 in Chapter IV- Pre-university education curriculum and Chapter VII- Management of the system and educational establishments, Section 1, General provisions, articles 70, 94, para. 2 and letter t, the establishment of the Virtual School Library and of the School e-learning Platform, which include examples of lessons for the school curriculum topics, examples of assessment tests, guides, digital resources, protected by Copyright and related rights law 8/1996, as

subsequently amended and supplemented, these becoming resources permanently accessible and free to any student or teacher, as well as the role of the Ministry of Education in building and ensuring their operation, the 2020 pandemic led to the forced digitalization of education.

Educational institutions and training institutions have made efforts to maintain the right to education. They currently use alternative options for remote learning and learning, various school learning platforms such as G-Suite with Google classroom and Google Meet, for synchronous and asynchronous teaching, Adservio, Microsoft Teams, Webex and Zoom.

LAW no. 1 of January 5, 2011, published in the Official Gazette no. 18/ January 10, 2011, Law that abrogated the Education Law number 84/1995 and Law number 128/1997- on the Charter of the didactic staff, provides in Art. 70, paragraph (3) The educational establishments use the school platform of learning in order to provide support to students during or outside school hours, or for those who, for health reasons, are temporarily unable to attend school; paragraph (4) The establishment, management and permanent enrichment of the Virtual School Library and of the School e-learning Platform is the responsibility of the Ministry of Education, Research, Youth and Sports.

It is amended and supplemented by several laws and ordinances, including Law 126/2020 to supplement the National Education Law no. 1/2011. It introduces a new paragraph in Article 70 after paragraph 2 which shall read as follows "The Ministry of Education and Research provides students and teachers the necessary infrastructure, consisting of devices and Internet access, in order to access the Virtual School Library and the e-learning platform."

In Article 94 (2), a new section z) is inserted after section (y), which shall read as follows: "z) provides to each teacher and to each student who is entitled to the social support scholarship a laptop or tablet device, connected to the Internet, in order to be able to participate in the e-learning activities carried out outside classes."

This draft law was adopted by the Chamber of Deputies in the meeting of May 20, 2020, in compliance with the provisions of art. 76 para. (1) of the Romanian Constitution, republished, promulgated by decree 363/2020 on July 3, 2020.

The explanatory memorandum mentions the disadvantage of the lack of digital facilities that result in the increase of the risk of dropping out of school, Romania being a state with a high level of risk of poverty and social exclusion, over a third of Romanian children being exposed to this risk - 38.1%. It differs in large cities 18.6%, 24.9% in small cities and 45.5% in rural areas.

The structural funds that can be accessed through the human capital operational programme 2014-2020, axis 6- Education and competence and other European Union programs in the future financial framework 2021-2027 represent a solution for the endowment and digitization of schools.

The didactic activity through technology and the internet is a form of organization of the didactic process that involves the replacement of the teaching-learning-evaluation hours, which presuppose the physical presence of the preschoolers/students in the classroom, with individual study activities and didactic activities in the online system, defined in the Order for the approval of the framework methodology on carrying out teaching activities through technology and the Internet as well as for the processing of personal data published in the Official Gazette number 837 of September 11, 2020. This activity, although clearly stipulated, becomes effective but equally depersonalized by the absence of direct contact, cancelling certain components of the teaching act and consequently teachers find themselves in the situation of reinventing themselves in terms of methods, and also in the situation

where students perceive the educational act as changed, a change that can distort the attitude towards education, and the actual performances of the students will be able to confirm or refute this statement.

The process of digitalization of education in Romania began with the implementation of projects such as CRED- Relevant Curriculum for Open Education for All, which started in May 2018 amounting to 42 million euro and with a duration of 4 years. It is meant to train, with the help of 900 trainers, a number of 55,000 teachers - 40,000 primary school teachers and 15,000 middle school teachers, in the use of attractive and adapted methods and contents. The project also includes the development of open educational resources (RED) for all levels and methodological guides covering the subjects.

Another project, implemented by the Administration Agency of the National Informatics Network for Education and Research, through the Operational Programme Competitiveness 2014-2020, carried out from September 2019 to September 2021, is the project which aims to create a digital platform with open educational resources, of an Edulib virtual library, in order to create a centralized integrated environment able to meet the needs of the use of educational resources in the modern educational process. The expected results are the creation of a digital platform with open educational resources, the endowment of 5,400 middle schools with multimedia kits and the training of 5,400 teachers.

The National Council of Students also proposed the project "Digitalization of Education - long-term solution", asking the Romanian Government to take directions of action in order to ensure the digitalization of education in a participatory, transparent, equitable manner, which represents a priority for the educational system. They also mention the position of the Lifelong Learning Platform on the importance of digitalization in education, a priority at European level, the National Strategy in the field of lifelong learning in Romania does not have monitoring indicators and is not reflected on the public agenda.

A U-report survey conducted by Unicef Romania regarding the online school tells us that a third of Romanian students are not satisfied with the online school and do not attend courses through virtual platforms. The most popular platforms used for online communication are Zoom (25%) and Google Class (23%), but also Whatssapp (20%). Other platforms used include Messenger (13%), Skype (3%) and Discord (2%). Another 218 children and young people mentioned other platforms and according to their answers, 33.98% have access to education during this period through the Adservio platform, 24.76% through Microsoft Teams, 7.77% - Google Services, such as Google Drive and Google Classroom, 5.34% - the platform of the school where they study, 3.40% -Webex, and less than 2% through the platforms Meet, 24edu, Sociology and WhatsApp. 18.45% of these respondents keep in touch with teachers through other platforms, namely Facebook and Facebook Messenger. Regarding the way students have adapted on these platforms, 82% have adapted easily or a little difficult, while 8% consider that it is difficult for them to adapt.

Between December 18, 2020 and February 15, 2021, the Strategy on the Digitization of Education in Romania is in public consultation.

The order on amending and supplementing the annex to the order of the Minister of Education and Research no. 5545/2020 on the approval of the Framework Methodology on the development of teaching activities through technology and the Internet as well as for the processing of personal data provides for the design of activities in both synchronous and asynchronous system and the obligation to participate in these activities (introduced by art.14 letter f.)

One of the biggest challenges was equal access to quality remote learning, as some teachers, trainers, students did not have digital skills or access to technology or the Internet, especially those from disadvantaged backgrounds, in rural areas, but and those with special educational needs, with a higher risk of early school dropout for those exposed from a socio-economic point of view. These institutions are more than places where people learn and train, as they also offer a sense of community, of socialization, and their lack can lead to anxiety, social isolation and stress.

Both teachers and trainers have adapted to remote teaching changing from face-to-face teaching, but as many lacked the necessary experience, knowledge, skills, aptitudes, a specific training was needed and an increase in workload occurred during this period. According to the OECD TALIS study (2018), less than 40% of teachers felt well prepared for the use of ICT in the teaching process.

The Council of Europe states in "Council conclusions on combating the crisis caused by the COVID-19 pandemic in education and training" the fact that trainers and teachers showed admirable dedication and creativity, an openness to collaboration, co-creation and mutual learning, even affecting the balance between their personal and professional lives. Adult learners, especially the low-skilled ones, do not have the digital skills needed to participate in digital learning, which diminishes their opportunities for improvement and retraining".

The pandemic has affected international and European learning mobility, with cross-border learning mobility programmes initially suspended or postponed, with many Erasmus + activities also moving to the virtual environment.

During this period, many quality educational materials and practices have been developed, virtual learning environments that facilitate the use of existing online learning platforms have been supported, new ones, but also team collaboration tools have been developed, television broadcasts have been used to provide educational content, professional development opportunities were provided for teachers and trainers, equipment for those from socio-economically disadvantaged areas or environments and printed educational materials were distributed in some cases, the access to digital content in libraries was facilitated and psychological support for those in need was provided.

The Council of Europe calls on the Commission, in accordance with its competences and with due regard for the principle of subsidiarity, to work closely with international organizations such as the Council of Europe, UNESCO and the OECD on the provision and dissemination of information on the implications of the COVID-19 pandemic on education and training.

**CONCLUSION**

These challenges also provided a valuable learning experience, accelerating the digital transformation of education and training institutions. The impact of the pandemic on education and training demonstrates the need for continuing the process of transformation and development of digital skills and competences of both teachers, trainers and students, continuing the exchange of information on experience and best practice, the examination of innovation opportunities to accelerate digital transformation of education and training institutions and reduce the digital sideslip.

I believe that, in order to strengthen resilience and prepare for future effective and appropriate emergency responses timely, the possibility of integrating high-quality digital learning as part of the educational offer at all levels, into all types of education and training

must be examined, with digital tools adapted to the ages and needs of learners and respecting the rules of data protection, privacy, cybersecurity and security, ensuring equal opportunities and continuous access to education and training for all ages, validating and recognizing learning outcomes acquired and supporting the development of digital infrastructure, digital skills and competences, through funding from the European Union and Digital Europe Programmes and strengthening the development of European and national public policies.

In creating the European Education Area, together with the Strategic Framework for European Cooperation in the field of Post-2020 Education and Training, the new Digital Education Action Plan and the updated Competence Agenda, the lessons learned from the crisis caused by the COVID-19 pandemic must be taken into account, regarding the digital transformation of education and training systems, paying particular attention to quality and societal challenges such as ensuring inclusion and equal opportunities, promoting cohesion and combating misinformation.

Further efforts should be made to facilitate exchanges regarding the challenges and measures taken by Member States, including by connecting and improving the availability of databases containing open educational resources and the access thereof, in order to facilitate the exchange of different remote learning methodologies, tools and materials. In this context, to capitalize on existing opportunities, such as those available through eTwinning, the School Education Gateway platform and the e-Platform for Adult Learning in Europe (EPALE), to promote the use of self-assessment tools such as SELFIE and HEInnovate to support the capacity and digital transformation of schools and higher education institutions.

**BIBLIOGRAFY:**

**[1]** Law of National Education no.1/ 2011, published in Monitor no 18/ 10 January, 2011 http://www.cdep.ro/pls/legis/legis_pck.htp_act?ida=101120

**[2]** Digital Education Strategy https://www.edu.ro/sites/default/files/SMART.Edu%20-%20document%20consultare.pdf

**[3]** https://www.unicef.org/romania/sites/unicef.org.romania/files/2020-07/ECAR%20CONSIDERATIONS%20FOR%20EDUCATION%20PROVISION%20Romanian.pdf

**[4]** https://edtechmagazine.com/higher/article/2020/05/emergency-remote-teaching-rigorous-online-learning-perfcon

**[5]** https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning

**[6]** https://www.roedu.net/News/View/95d06643-3145-4fb9-ad53-caffa2e79d03

**[7]** https://www.roedu.net/Projects/View/86d415fb-aeaa-4047-81ce-189c3eb18dd8

**[8]** . https://consiliulelevilor.ro/wp-content/uploads/2020/03/Digitalizarea-educa%C8%9Biei-policy-paper.pdf

**[9]** https://eacea.ec.europa.eu/national-policies/eurydice/content/lifelong-learning-strategy-64_ro

**[10]** https://www.unicef.org/romania/ro/pove%C8%99ti/sondaj-u-report-privind-%C8%99coala-online

**[11]** http://lllplatform.eu/policy-areas/participatory-democracy/

**[12]** Strategia Națională de Învățare pe tot Parcursul Vieții 2015-202 https://eacea.ec.europa.eu/national-policies/eurydice/content/lifelong-learning-strategy-64_ro

**[13]** https://images.capital.ro/wp-content/uploads/2020/12/OMEC-6200_Modificare-Metodologie-on-line_1.pdf

**[14]** http://legislatie.just.ro/Public/DetaliiDocumentAfis/229929

**[15]** https://data.consilium.europa.eu/doc/document/ST-8610-2020-INIT/ro/pdf

**[16]** https://digital.educred.ro/

**[17]** https://eduonline.roedu.net/

# ONLINE EDUCATION - PROBLEMS AND SOLUTIONS

**Cristina Veronica ANDREESCU[1], Adina NICHITA[2],
Dumitru ENACHE[3], Bianca MIHAILOVICI[4]**

[1]Lecturer, PhD, University of Medicine and Pharmacy "Carol Davila", Bucharest; [2]MSc, Faculty of Environmental Engineering and Food Science; [3]PhD in Systems Engineering, University of Oil and Gas, Ploiești; [3]Teacher, High School;
ROMANIA,

E-mail: cristina.andreescu@umfcd.ro, nichitaadina79@gmail.com,
ing.dumitru.enache@gmail.com, biancamihailovici@yahoo.ro,

## ABSTRACT

*The online platforms have been in a continuous development since the beginning of their appearance, being classified according to the field of activity. This article discusses some features of the online educational platforms, that serve the distance learning adopted during this pandemic period by the majority of nations on the planet, to continue the educational progress, at all levels of learning. The article is intended exclusively for the platforms used at the pre-university level of education and illustrates theoretical notions about them, represented by typologies, characteristics, and the features that platforms have been applying. The online platforms, as any other software device, possess advantages and also limitations of the available functions, and this article illustrates their approach in the context of the formative type of assessments, as well as of the summative ones. The effects of using these platforms are highlighted by using the questionnaire survey. This has the final aim to identify the perceptions of the respondents on the use of the online educational platforms for conveying the school information and also to identify the psycho-social aspects that this approach entails. At the end of the article the results of students' attendance at the online courses are presented, results that were collected based on the monitoring study conducted on a sample of students.*

**Keywords:** *online educational platforms; Google Suite; formative assessment; summative assessment; questionnaire; students' attendance at online classes;*

## INTRODUCTION

The online educational platforms are defined as computer information systems with various forms, used in the online education referred to as e-learning, online learning or distance learning and which allow the creation of educational content and its management. These platforms have evolved over time, together with the evolution of the Internet, of the mobile applications as well as of the market requirements. Thus, the functionality of the platforms used in education has started to show a growing interest. Online platforms are represented in different ways and have multiple features.

# 1. PLATFORMS USED IN THE PRE-UNIVERSITY EDUCATION TYPOLOGY, FEATURES, FUNCTIONALITY

In the context of the Corona Virus pandemic, these e-learning platforms have shown enormous interest in the carrying out of studies from different levels of education. Thus, through the transition of education from the physical to the online environment, their use represented the optimal solution, and in this way the use of different platforms or IT tools was established, depending on the reference level of education, according to the measures adopted by the ministry. (https://www.edu.ro/sites/default/files/_fi%C8%99iere/Minister/2020/inv.preuniversitar/note%20%2B%20proceduri/adresa%20MEC_%20ISJ_uri%20_10.03.2020_ref.decizie%20CNSSU.pdf.)

The online platforms fall into the typology of a digital library, allowing facilities such as multimedia files, wiki files, audio-video files, content storage and audio-video or video conferencing conversations. There are platforms that present software tools for each task and here we refer to different applications that are integrated together to create an entire educational package or a dedicated ecosystem such as the Google Suite, consisting of the Google Classroom platform and the online tools such as Google Meet, Google Mail or Gmail, Google Docs, Sheets and Slides. In addition to these, other platforms and tools are highlighted, such as: Microsoft Teams together with the suite of tools Word, Excel, PowerPoint, Zoom, Whatsapp, Facebook Messenger, Skype or Discord. The latter are online messaging tools, which allow the sharing of content in different formats and the possibility of video conferencing, but they do possess certain limitations.

In general, an online platform used in the pre-university education includes the following features:

1. Providing a guide for installation, configuration and administration of the educational platform;
2. The aspect of the interface must be designed so as to include visual elements similar to an educational environment organized by the theme of specific icons, fonts and colors;
3. To facilitate synchronous and asynchronous communication through it;
4. To allow the intuitive administration and efficient monitoring of the information presented through it;
5. The educational content should present an organized and intuitive management according to the educational level;
6. To include built-in editing methods for the educational content under different formats;
7. To allow functionalities for the offline self-assessment using asynchronous procedures, also to allow functionalities for the online assessment using synchronous procedures on the acquired theoretical and practical knowledge;
8. Implementation of an indefinite training program that allows periodic checks during an entire educational process or during several educational processes;
9. Assistance in using the platform and feedback on the platform and the services offered by it.

According to: http://www.ccdialomita.ro/Oferta%20de%20programe/Schita%20curs%20-%20Abilitare%20platforme.pdf

According to an evaluation research report conducted in May 2020, the most used online educational platforms for the pre-university environment are the platform Classroom

offered by Google and other platforms such as Moodle, Edmodo, Easyclass, these being nominated by 2.6 people out of 4 evaluated. Of these platforms, the one that stood out with a high percentage compared to the others is the Google Classroom platform, being used by teachers in a percentage of 68%. (https://www.psih.uaic.ro/wp-content/uploads/sc_onl_rap_apr_2020.pdf )

**Google Classroom** is the online platform used for content sharing, creating lessons, forming groups by class of students, and has the possibility of posting different types of files in various formats, also has the availability of various assessment tools and evaluating student feedback, etc.

The main features of the Classroom platform are presented in the table below and include attributes for both teachers, students, parents and ICT administrators, according to https://www.eduapps.ro/blog/20-de-motive-pentru-care-sa-folosesti-aplicatia-google-classroom/.

| Statute | Classroom features |
|---------|--------------------|
| Students | Creating, uploading, sending and submitting the assignment; Viewing materials, activities and terms for submitting the assignment; Receiving and providing feedback Getting grades |
| Professors | Creating and managing the created courses; Creating, managing the assignments as well as receiving or evaluating them; Direct, real-time evaluation of the students' performance; |
| Parents / Guardians | Receiving statistics on the activities of their own children by e-mail, the summaries include information on work tasks, the student's activity in class, the situation of the assignment solved by the student; The parents or guardians are not permitted to connect to Google Classroom directly, the information is sent to them through a report on their personal email address; |
| ICT Admin | Creating, viewing or deleting courses from the platform, only in the field they manage; Possibility to add or remove students or teachers from a course; Viewing the activities corresponding to the courses in the administered field; |

*Table 1*: *The Google Classroom platform features depending on the educational status*

**Google Mail** or Gmail is the email service that creates a Google Account, and is used for authentication in the email account, being also used for authentication for the rest of the applications or tools in the Google Suite, which are embedded in an ecosystem with a single sign-on for all applications. Basically, in order to be able to use the Google package, the creation of an email in this domain is indispensable, the authentication in these platforms not being possible without an existing Gmail account. Gmail is available in e-mail format, being accessed through a web browser, or through the mobile application available on the Android or iOS platform.

**Google Meet** is a tool or application that facilitates the asynchronous communication, by video call / videoconference, in a group of people with the status of teacher, student, etc., this being used in the Romanian pre-university education with a ratio of 2.48 people on a

representation scale from 1 to 4 according https://www.psih.uaic.ro/wp-content/uploads/sc_onl_rap_apr_2020.pdf. The main features of the application are represented in the table below.

| Statute | Features in Google Meet |
|---|---|
| Student / Teacher | Two-way audio and video calls at a maximum resolution of 720p;<br>Chat window for conversation participants;<br>Call encryption between all users;<br>Noise cancelling audio filter;<br>Ability to join meetings through a web browser or through Android or iOs apps;<br>Integration with Google Calendar and Google Contacts for syncing contacts;<br>Screen sharing for mobile devices, and for the desktop the function of sharing the open application running in the background;<br>The host has the possibility to allow the entry of a person in the conference or to remove a person from the conference; |

*Table 2. Google Meet platform features based on educational status*

## 2. ADVANTAGES / LIMITS OF THE ONLINE PLATFORMS IN THE FORMATIVE AND SUMMATIVE EVALUATION

The e-learning platforms are suitable for their use in teaching multiple disciplines, in other words they are multidisciplinary. In order to have a point of view close to the model of the physical reality in schools, it is necessary to involve in the evaluation of platforms people who have knowledge based on different fields of activity, who should work together to find common ground.

Thus, the involvement of experts in computer science or programmers is the basis for creating the platform or digital educational environment at a code level, at an algorithmic program level, of information system experts, to organize how information is presented, but also for the way in which the search for information gives certain results. The experts in psychology and education are responsible for the impact that the use of these platforms and the transmission of knowledge through them are perceived by the students; they are also responsible for the results that the students achieve through interaction and teaching-learning, through online platforms.

The ICT experts are responsible at the level of the educational institution for the proper functioning of the platform they manage, they are also the ones who can communicate their features, the possible system bugs, or future improvements that can be made to the respective platform.

The main *advantages* of using online platforms, compared to the use of the traditional way of organizing training activities, are the following:

- the continuous availability, through an active internet connection; the information is just a few clicks away, unlike the classic methods by which information was presented in a book (usually in the textbook), thus reducing considerably the time for search;

- there is no location limit, through active internet connection and a device compatible with the platform, students can upload asignments or answer questionnaires from different locations, unlike the traditional version that required attendance at school, where the location was established as class of students;

- facilitates simultaneous access to the platform, so that several users, with different status, can be authenticated on one platform at the same time;

- efficient retrieval of information by keyword search, this allows a quick transition to the desired notions in a text, e-book or other bookstores that have a large volume of written information;

The main *disadvantages* of online platforms are the following:

- compliance with copyright policies, retrieval of information from certain sources or sharing of information under a different name must include a reference to the authentic source from which the information was retrieved and whether there is permission to reproduce it;

- the digital information is not always presented in an organized form, depending on the user or author who added the content to the platform;

- the high initial infrastructure cost;

- the transfer of multimedia files requires that the network bandwidth be adapted to a large number of files, either small and numerous files, or large but limited in number;

- the speed decreases progressively with the number of users connected simultaneously on the platform;

The assessment of students in the case of distance learning involves approaching different assessment strategies and methods, including the following:

1. Formative or summative assessment;
2. Objective assessment, this type of assessment implies the fulfillment of some established objectives;
3. Normative assessment presupposes a norm or a statute and reflects the position of a student towards another student within an established group;
4. Quantitative assessment;
5. Qualitative assessment.

B.S. Bloom (1956) states in his paper entitled "Taxonomy of educational objectives: the classification of educational objectives" that the notion of educational objectives comprises three major planes: cognitive, affective and psychomotor. B.S. Bloom presents his work as a motivation for teachers to increase their focus on all three educational plans, thus achieving a holistic view of education, a notion also presented in a doctoral thesis summary by a postgraduate student Monica Florea about "Contributions to the evaluation of e-Learning systems" published in 2011 in Sibiu. (http://www.nazarko.pl/public/data/resource/upload/00003/2568/file/contributii_privind_eva luaresa_sistemelor_de_e_learning.pdf)

Khan has developed a model called CAPEODL (Comprehensive Approach to Program Evaluation in Open and Distributed Learning) in which he considered the formative assessment as a component of each stage of the e-Learning process and not just a separate component of the content development process.

(http://www.nazarko.pl/public/data/resource/upload/00003/2568/file/contributii_privi nd_evaluaresa_sistemelor_de_e_learning.pdf.)

The formative (continuous) assessment consists in the ongoing evaluation of the students' knowledge throughout the training process, usually after short intervals.

The assessment results, such as formative (continuous) or summative, cumulative or review ones, can be used to improve teaching.

The example can be represented by students who learned the criteria of the amounts in a proportion of 80%. The conclusion we can draw when we observe the results obtained

by students following a summative, cumulative or review assessment of a test taken in mathematics or another discipline, may lead the teacher to make decisions about improving his teaching. In this case, the decisions will primarily focus on improving the students' future knowledge. Following the summative and formative assessment, and the conclusions he reached, the teacher would design and create the future lessons according to the registered school results. According to: (https://www.schooleducationgateway.eu/ro/pub/viewpoints/experts/formative-assessment-learning.htm)

## 3. HOW ONLINE PLATFORMS INFLUENCE SCHOOL PERFORMANCE AND THE PSYCHO-SOCIAL COMPETENCES OF STUDENTS - THEORETICAL APPROACH AND QUESTIONNAIRE SURVEY

A critical reflection on the relationship between information technology and the development of the act of teaching, may lead us to a fundamental conclusion: the presence or the lack of technology in the classrooms in the educational institutions is not the factor that directly influences the teaching-learning process. We appreciate that of a much more importance is the quality of the pedagogical act, which leads to the formation and development of the students' personalities.

The didactic technology has been defined by different authors, as follows:

"Any definition of the teaching technology must include the efficient use of modern tools, taking into account the cognitive abilities needed to respond to changes that will inevitably occur due to the technological evolution" (Gauer). http://portale.unibas.it/site/home/didattica/formazione-degli-insegnanti/documento23493.html

"Teaching technologies are a set of processes and tools that are adopted to combat teaching requirements and problems, particularly in this phase using the latest means, those related to computer science" (Roblyer and Edwards). According to: http://portale.unibas.it/site/home/didattica/formazione-degli-insegnanti/documento23493.html

„Teaching technologies represent ... a systematic way of designing, conducting and evaluation of the global teaching process in specific objective terms, with attention to research on human learning and communication, through resources, whether human or not, to make the most efficient training process" (Seattler). According to: http://portale.unibas.it/site/home/didattica/formazione-degli-insegnanti/documento23493.html

The use of online platforms leads to the formation of digital skills that are characterized by: specific knowledge, skills and attitudes:

- knowledge: these involve the awareness and assumption of the role and opportunities that the online system offers, both in the socio-educational environment, and in everyday life; through these both the students and the teachers use the different types of computer platforms to access information structured in different forms, based on the knowledge gained so far.

- skills: the ability to systematically search, extract and interpret the information presented through websites, platforms, blogs, according to specific requirements; these skills are formed over time depending on the effort, the allotted time and the interest given,

depending on the number of searches performed and the nature of the field from which the information is to be found.

- attitudes: the use of technology leads to the formation of a critical and reflective spirit in relation to the information provided by the online search algorithms; thus, by developing them, experience will be formed to distinguish the true value of information structured on different platforms, sites stored on the Internet, because the online environment offers easy and fast access to information but also has a degree of untruth of the information coming from various sources of information.

The teacher, as an essential figure in fulfilling the act of teaching, has the role to apply in the teaching-learning-assessment process, even online, a series of good practices through which the psycho-social skills may be developed, which in turn have the role to contribute to the formation of the preadolescent's and adolescent's personality, as well as to the performing of a quality education. The good practices undertaken by the teacher may consist of different activities such as: interview-type training activities, with the task of developing interpersonal relationships, role-based training activities, with the task of developing adaptive skills, training activities aimed at developing the capacity and skills to adapt the authority in real educational situations, training activities to develop capacities and skills to express attitudes like: understanding, friendship, empathy.

Carrying out a case study, a questionnaire applied to two classes of students from a high school in Dîmbovița County was completed. The questionnaire contains six questions whose role is to obtain feedback from students on how students perceive that their digital skills, psychosocial skills, and school performance are influenced by using the online platforms in conducting the online teaching activities. We further present the results obtained from the application of the questionnaire.

The following conclusions can be drawn from the results expressed in percentages:

In question number 1 from the questionnaire, 42% of students believed that at the end of the 2020-2021 school year their digital skills would be improved, and 58% believed that their digital skills would not be improved. Also on this question, 0.00% considered that their digital skills would be insignificantly improved.
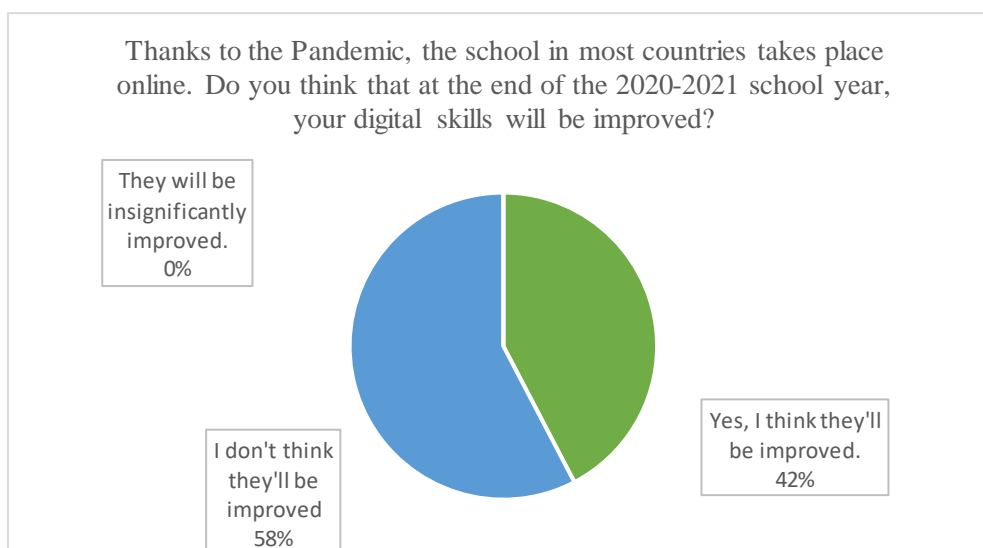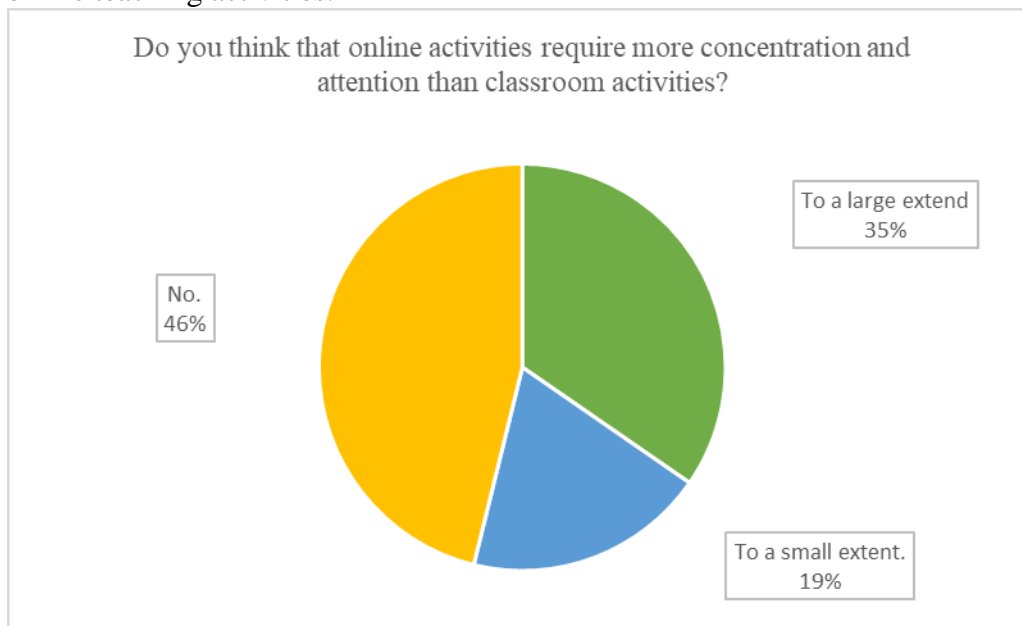


**Chart 1.** *Percentage results corresponding to question number 1*

In question number 2, 66% of students answered that they missed their classmates and teachers. 19% of students said that they did not miss their teachers and classmates, and 15% said they did not care if they went to school or not.
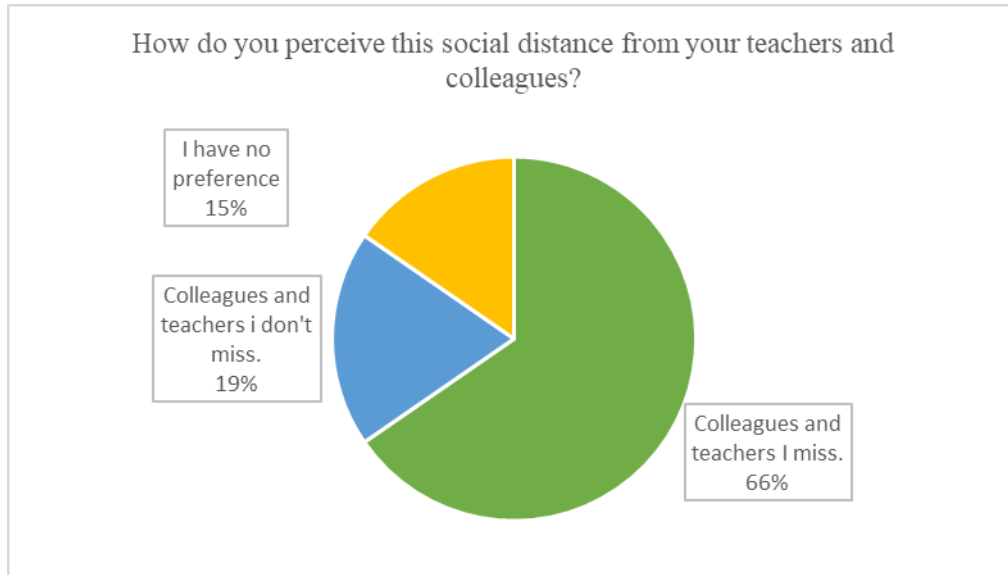


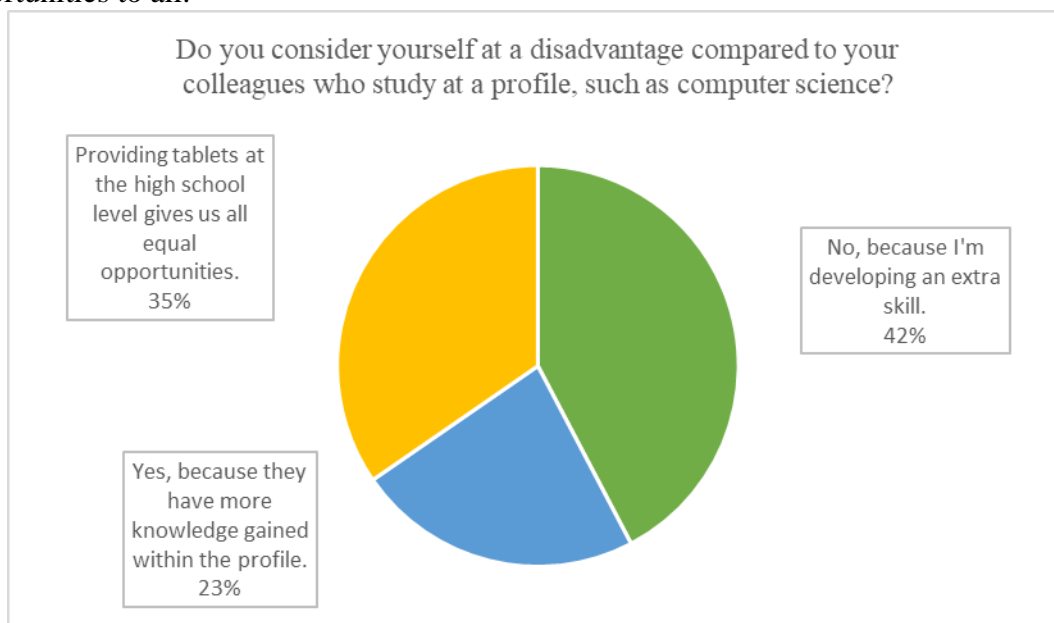*Chart 2. Percentage results corresponding to question number 2*

In question number 3, 35% of students considered that the online activities required more concentration and attention compared to the lessons taught in class. 19% believed that the online activities required their attention and concentration to a small extent, and 46% believed that the demand for attention and concentration were the same in either of the two situations, both in the classroom and in the places where they were during the performance of the online teaching activities.



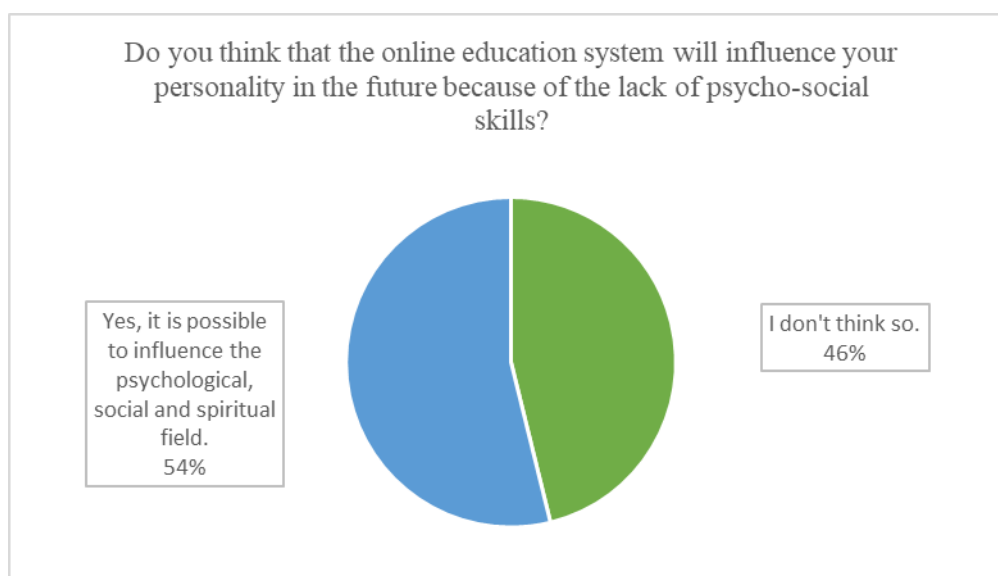*Chart 3. Percentage results corresponding to question number 3*

In question 4, 42.30% of students considered that they had a disadvantage compared to their peers who were at a field of study such as computer science, because they could develop an extra ability in comparison to them. 23.07% of students considered that they were at a disadvantage compared to their colleagues studying at a field of study such as computer science, because they had more knowledge acquired within the domain. A percentage of 34.61% of students believed that providing tablets at the level of schools offers equal opportunities to all.
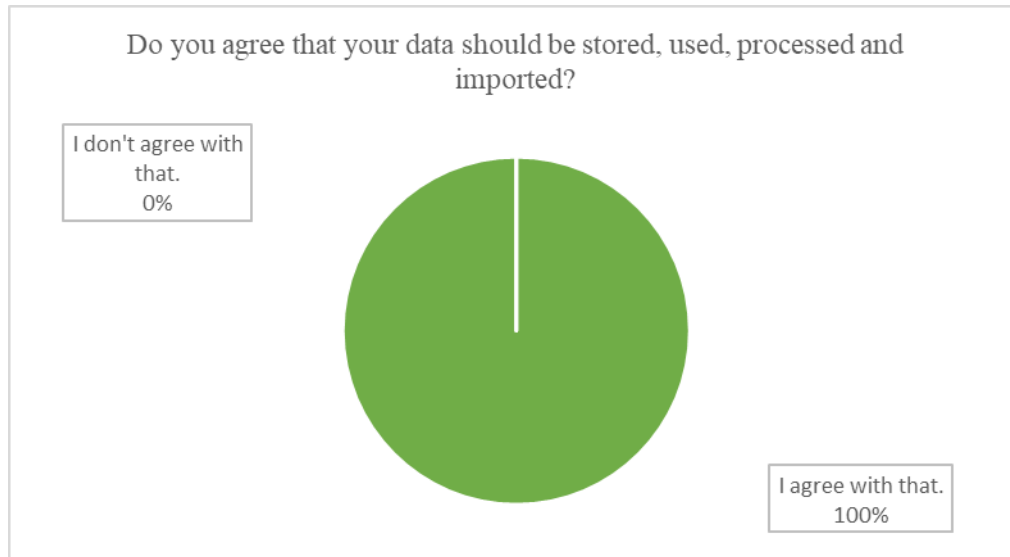


***Chart 4.*** *Percentage results corresponding to question number 4*

In question number 5, 53.84% students believed that the online education could influence their personality in the future by not achieving the psycho-social skills, and a percentage of 46.15% students believed that their personality would not be affected, on the contrary, the psycho-social skills would thus be achieved.



***Chart 5.*** *Percentage results corresponding to question number 5*

In question number 6, 100% of students wanted their data processed.



*Chart 6. Percentage results corresponding to question number 6*

## 4. ATTENDANCE AND ACTIVE PARTICIPATION IN THE ACTIVITIES CARRIED OUT IN THE ONLINE SYSTEM OF STUDENTS (IN THE RED SCENARIO) - ANALYSIS PERFORMED ON A SAMPLE OF TWO CLASSES OF STUDENTS DURING 50 DAYS

The case study was conducted at a high school in Dâmbovița County and aimed to compare the participation of two classes of students in online lessons conducted by teachers, but also to observe the fluctuation of students' attendance to these activities. For this case study, two classes of students were randomly selected (the 9th and 11th grades, respectively). The effective participation of the 9th and 11th grade students in online activities was observed during 7 weeks, for two subjects, specific to each class, while trying to identify the causes of the online absenteeism.

In the ninth grade, at the beginning of the red scenario, the attendance of the students in the online lessons, in subjects 1 and 2 was the following:
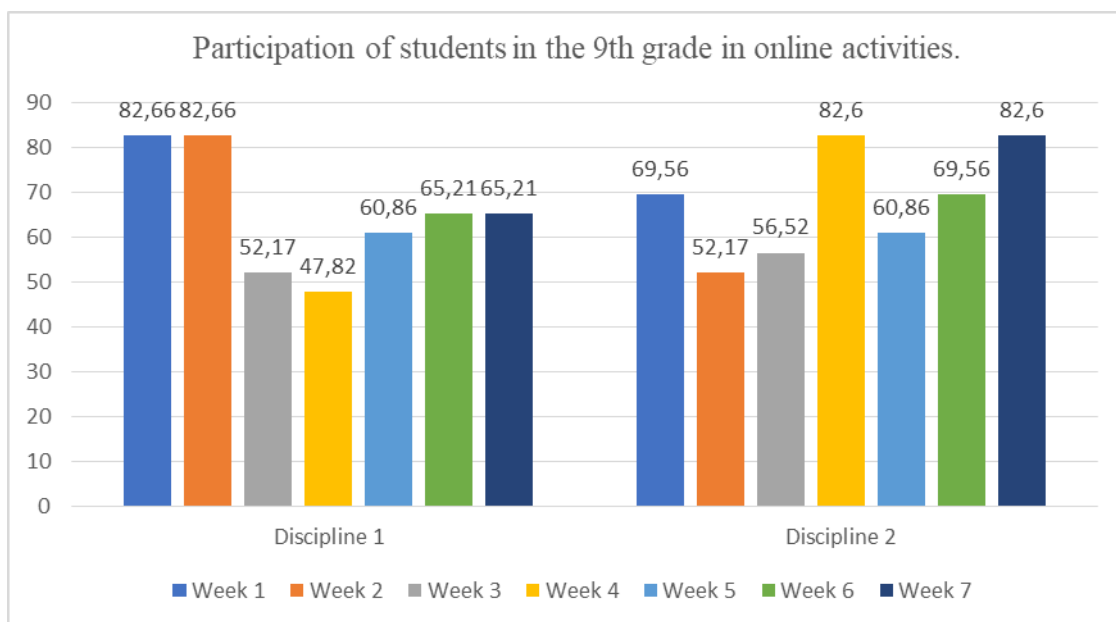
***Chart 7.*** *The evolution of the attendance of the 9th grade students in subjects 1 and 2*

In the eleventh grade, at the beginning of the red scenario, the attendance of the students in the online lessons, in subjects 1 and 2 was the following:
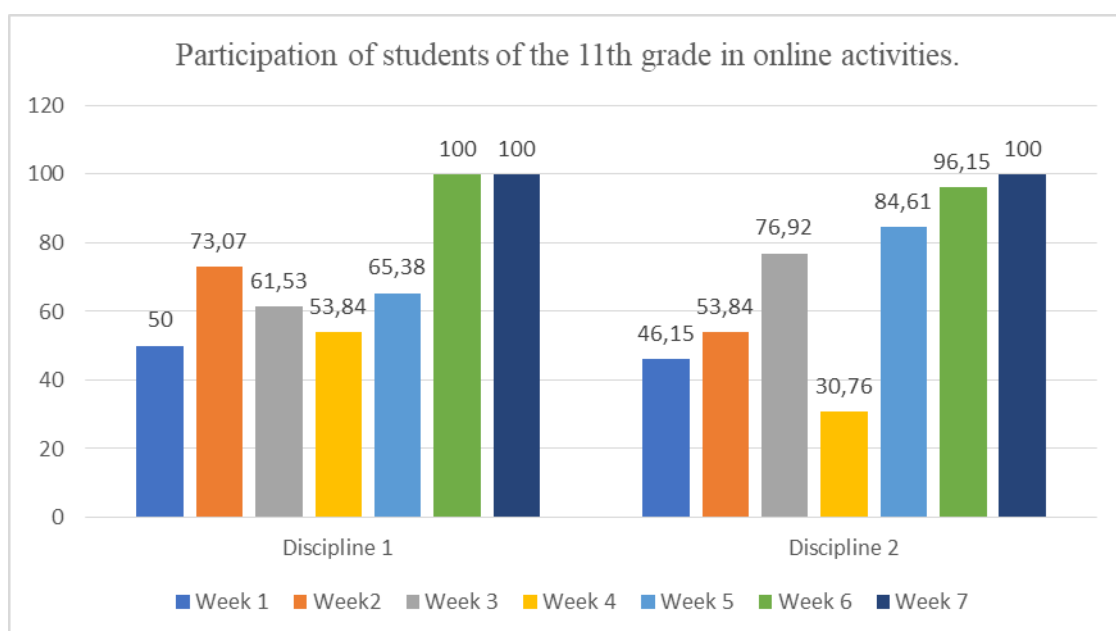


***Chart 8.*** *The evolution of the attendance of the 11th grade students in subjects 1 and 2*

In order to represent the comparative evolution of the attendance between the 9th and 11th grades, an average of the attendance was made for all 7 weeks from discipline 1 and discipline 2, thus obtaining four results expressed in percentages, presented in chart 9. From the comparative results of the two classes we can notice the high attendance of the 11th grade for discipline 1, a result of 71.97% compared to 65.21% for the ninth grade for the

same discipline. Also in the case of discipline 2 there was an attendance of 69.67% for the 11th grade compared to 67.69% corresponding to the 9th grade. From these results, the high attendance of the 11th grade is observed compared to the 9th grade, which indicates a higher interest for students' participation in classes.
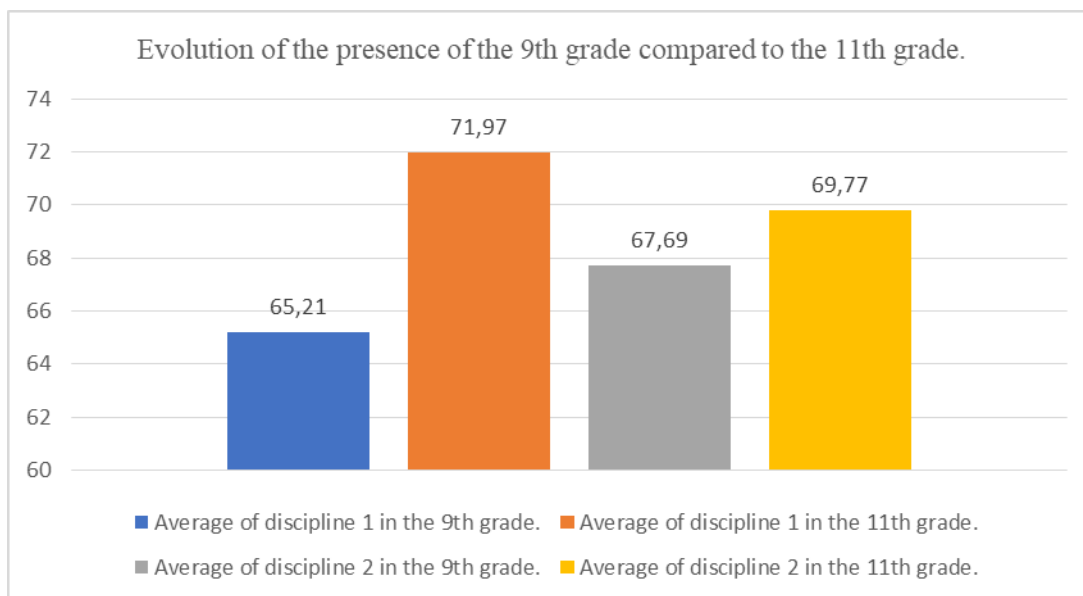


*Chart 9. The comparative evolution of the attendance between the 9th and 11th grades*

**CONCLUSION**

The causes that lead to the non-participation of students in the online activities are multiple, but bring in the spotlight the poor socio-economic aspects, hence the lack of the technological tools necessary to participate in the online lessons or of the possession, at the family level, of a single technological device that must be used at the same time by two or more persons. Another cause that has been identified is the technical work performed by operators within companies, on Internet networks, and as a result, it has led to the impossibility of achieving students' access to the Internet during online activities. Allotting resources to schools, such as tablets, and distributing them to the students in need is currently one of the solutions.

## BIBLIOGRAFY:

**[1]** Florin POP, (2017). 20 reasons to use the Google Classroom app. According to: https://www.eduapps.ro/blog/20-de-motive-pentru-care-sa-folosesti-aplicatia-google-classroom/

**[2]** Monica FLOREA (2011). CONTRIBUTIONS REGARDING THE EVALUATION OF E-LEARNING SYSTEMS - Abstract of doctoral thesis. Conformable: http://www.nazarko.pl/public/data/resource/upload/00003/2568/file/contributii_privind_evaluaresa_sistemelor_de_e_learning.pdf

**[3]** Petre Botnariuc, Constantin Cucoș, Cătălin Glava, Daniel E. Iancu, Marian D. Ilie, Olimpius Istrate, Adrian Vicențiu Labăr, Ion-Ovidiu Pânișoară, Doru Ștefănescu, Simona Velea (May 2020, University of Bucharest Publishing House). ONLINE SCHOOL, ELEMENTS FOR EDUCATIONAL INNOVATION, Evaluative research report. According to: https://www.psih.uaic.ro/wp-content/uploads/sc_onl_rap_apr_2020.pdf

**[4]** Enabling teachers in pre-university education to use educational platforms.(accessed in October 2020). According to: http://www.ccdialomita.ro/Oferta%20de%20programe/Schita%20curs%20-%20Abilitare%20platforme.pdf

**[5]** Press release of the Ministry of Education and Research (March, 2020). According to: https://www.edu.ro/sites/default/files/_fi%C8%99iere/Minister/2020/inv.preuniversitar/note%20%2B%20proceduri/adresa%20MEC_%20ISJ_uri%20_10.03.2020_ref.decizie % 20CNSSU.pdf

**[6]**Formative assessment, assessment for learning and so on. (accessed in 2020). According to: https://www.schooleducationgateway.eu/ro/pub/viewpoints/experts/formative-assessment-learning.htm

**[7]** Methods and technologies in the teaching of Mathematics (accessed January 2021). According to: http://portale.unibas.it/site/home/didattica/formazione-degli-insegnanti/documento23493.html

# TIKTOK - THE INFLUENCE ON SCHOOL PERFORMANCE AND SOCIAL LIFE OF ADOLESCENTS

**Adina NICHITA[1], Dumitru ENACHE[2], Cristina Veronica ANDREESCU[3],**

[1]MSc, Faculty of Environmental Engineering and Food Science; [2]PhD in Systems Engineering, University of Oil and Gas, Ploiești; [3] Lecturer, PhD, The University of Medicine and Pharmacy "Carol Davila", Bucharest;
ROMANIA
E-mail: [1]nichitaadina79@gmail.com, [2]ing.dumitru.enache@gmail.com, [3]cristina.andreescu@umfcd.ro

## ABSTRACT

*Mobile applications are a significant part of our lives, especially the applications that help solve particular problems at certain stages of our lives or those that are the very object of our work. In the field of education, mobile applications have been integrated in the teaching of lessons or in the transmission of information. Various applications on the market have been largely adopted for the information transmission from the educational environment. TikTok is one of these applications, and in this article we aim to analyze the advantages and disadvantages of using this application in the educational environment. At the same time, the effects of the heavy use of this application by adolescents are analyzed and also inadequate situations to be avoided in the use of the application are highlighted. Statistical data are presented through a questionnaire-based study. At the end of the article opinions on the purpose of the application and its use in education, as an educational tool are presented.*

**Keywords:** *applied questionnaire; educational tool; social media; TikTok;*

## INTRODUCTION

Currently, social media are some of the first means of communication and interaction in the world, blossoming enormously in the recent years, in addition getting diversified both in number and in terms of the functions they possess. Each social network has a special character and exhibits common and yet unique functions. The use of social networks in the field of education implies one of the measures accessible to pupils, students, teachers, that have been adopted as a fragment within the life of each of us.

From an educational point of view, these can be seen as a simple educational tool, designed to transmit different types of media content among the users, offering within them various functions, in order to facilitate communication, such as text messaging, multimedia messaging, user account creation, possibility to create groups. Thus, the information transmission is simplified by a few clicks, but also by the speed with which the information is conveyed to the users.

Since the occurrence of the social media, they have been surrounded by various pros and cons about their existence and the benefits and risks they present.

In the education field, the advantages of the social media are: fast interaction with other users, videocall, transmission of multimedia files, the possibility of a private conversation, encryption of the conversations, back-up of conversations, inconsiderable distance between users, instant feedback, through push notifications .

Among the disadvantages there should be mentioned: data confidentiality, security of personal data, cyberbullying, the possible addiction it generates, the display of inappropriate information, the permanent internet connection, the consumption of considerable time resources.

Looking from different points of view, both students, teachers and all the persons involved in education, may use the different social networks as a new method of transmitting information to their own pupils/students and not only. Thus, the field of education may be extended from the school to the social area. On the other hand,  the negative effects that social networks have should be also taken into account and therefore, their management should be performed consciously, prior to the disadvantages changing the course of our lives.

## 1. TIKTOK – EDUCATIONAL TOOL

TikTok is a mobile application available on different operating systems, Android, iOS and is considered a media application because its functionalities are the creation of short-form video and its sharing. The application is available worldwide through various Market Apps such as Huawei App Gallery, Google Play Store or Apple App Store. Being an application available worldwide, it quickly attracted the attention of the users of other social media platforms such as Facebook, Instagram, Youtube, and as users began utilizing it, the interest for it increased exponentially. Hence, an assessment made by Sensor Tower (2019) showed that this app registered a number of 33 million downloads in the App Store in the first quarter of 2019, thus surpassing the other social platforms mentioned above. (https://www.oberlo.com/blog/tiktok-statistics#5_TikTok_Usage_by_Country )

According to a statistical report conducted in January 2021 by Brandon Doyle, TikTok is available in over 150 countries, with over 1 billion users. Brandon states that most of the TikTok audience is in the 13-40 age range. Referring to some statistics, according to Brandon, TikTok has almost one billion active users per month. Starting in November 2018, when there were approximately 680 million active users the number has currently risen to 1 billion. (https://wallaroomedia.com/blog/social-media/tiktok statistics / #: ~: text = Total% 20App% 20Downloads% 20% E2% 80% 93% 20The% 20TikTok, Tower% 200n% 20April% 2029% 2C % 202020)

Given this exponential development, the question has arisen as to whether this video share application may be used as an educational tool to convey knowledge to one's students via short videos. Various teachers have embraced this application as a means of transmitting information, whether we are talking about math teachers, biology teachers or about teachers of other subjects, they all have the opportunity, by creating short videos, to transmit the information online.

The main advantages of TikTok in content creation are: the duration of the videos, their length being as short as a couple of seconds, the possibility of making a video through the application on your smartphone, without the need for a sophisticated film equipment, editing may be performed also from the phone, therefore the time to create and post a video is reduced, without the need for a PC and complex editing programs. Among other advantages of TikTok in the transmission of knowledge is the content categories from which

users can watch videos, the organization by areas of activity allowing users to watch videos from that particular segment. Moreover, a video added in the educational field, is viewed through the platform not only by its own students but also by other students, from other regions, schools, but also by users who are not pupils or students, but individuals from society, hence widening the audience, one may discuss about an extension of the school education towards an informal, social one.

The disadvantages of TikTok in the educational environment are: the impossibility of conducting video conferences, the time allotted to a video is reduced, in comparison to other platforms such as Youtube, so lectures may not be posted, or activities to conduct a lesson in class. Being a video platform, it does not allow sharing text files, spreadsheets or PPT / Prezi presentations or their storage in a designated space, in comparison to Google Classroom.

## 2. PSYCHO-SOCIA L ASPECTS OF TIKTOK AMONG ADOLESCENTS

In the UNICEF Publication "Creating resilient education systems in the context of the Covid- As described in the previous passage, TikTok has positive effects on the pupils and the society as a whole, but it also has negative effects. They largely depend on the end user as well as on how he understands the use of TikTok. The improper use of the platform by users implicitly leads to the creation or distribution of inappropriate content.

Thus, certain negative aspects are distinguished:

10. Having mostly a young audience, they develop a possessive character to improve their own physical appearance, which can sometimes lead to frustrations and even a slight depression related to the way each one looks;
11. Choosing the wrong topic attracts viewing unwanted content.
12. Most users believe that TikTok is a way to make any type of content go viral; in this way, in order to increase one's audience, one posts certain videos with different themes, some pleasant, others inappropriate, which leads to a reduced viewing. As a result, depression, frustration may appear as to the expected personal outcome of a video, which implies emotional discomfort.
13. Dangerous physical actions sometimes become intensely viewed; hence, stunts, unsupervised fighting, the use of pyrotechnic objects for various purposes, represent a series of actions that involve physical injury, either in a mild or in a serious form, these being performed not according to some protection laws, but only according to everyone's beliefs.
14. By excessively using TikTok, teenagers dismiss a lot of the time offered to the family, friends, so most of the time they spend online, this having negative consequences in terms of the indivisual's social life.
15. TikTok is an application that requires, for viewing different videos, an important resource of time, some users not being aware of the duration spent online, and that the time allotted for the study is diminished. In their minds, an addiction is created on viewing as many videos as possible and thus the notion of time is lost.

All these aspects were reported by Sonika Garg in an article called "Tik Tok Latest News: How it's affecting Youth and teen negatively "posted in May 2020. (https://techzimo.com/tik-tok-negative-impact/ )

## 2. QUESTIONNAIRE-BASED SURVEY AND INTERPRETATION OF THE RESULTS

This survey aimed to fill in a questionnaire with a content of seven questions. The questionnaire was applied to a sample of 50 adolescents, both girls and boys aged between 14 and 18, from different high schools in Dâmbovița County.

According to the questionnaire, the following results were obtained:

Question number one of the survey aimed to identify the use of the TikTok application among adolescents. The result processing of this question identified that 82% used this application, and 18% of adolescents did not.
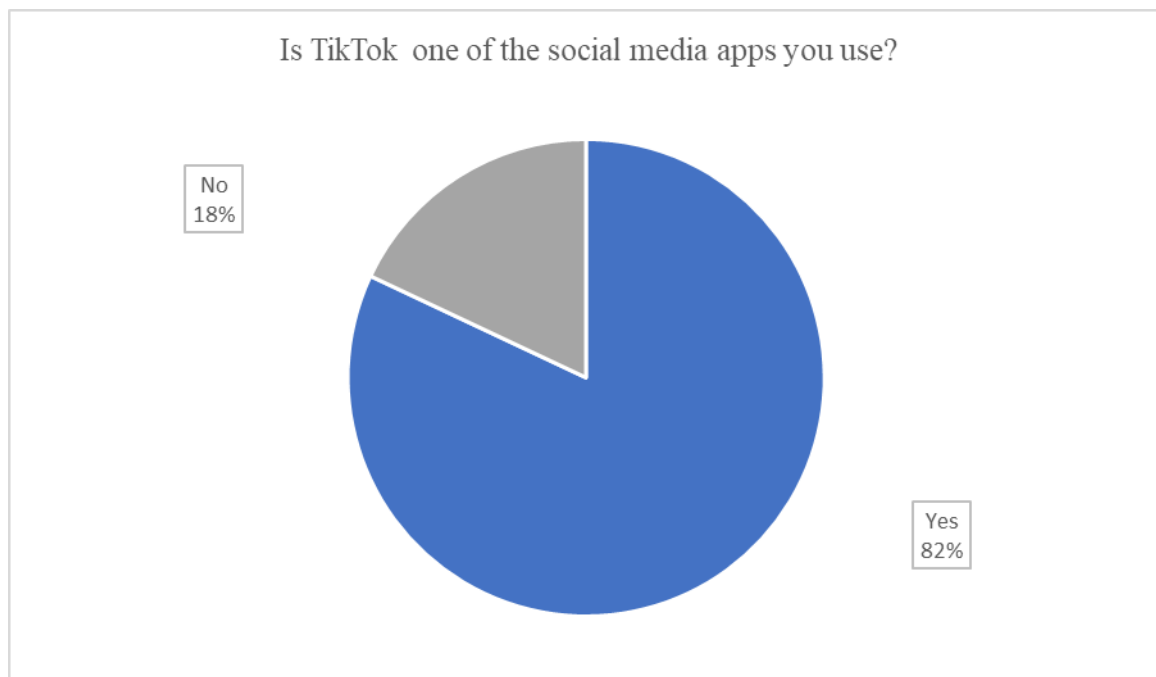


*Chart 1: Interpreting survey results from question 1*

Question number two aimed to identify the time spent by teenagers on this application. Therefore, the time spent by the teenagers on TikTok application was less than 30 minutes / day for 40% of them, and 60% of teenagers stated that the time spent on this application was more than 30 minutes / day.

By watching the clips, the time spent in a day on the app is?

Under 30 minutes;
40%

Over 30 minutes;
60%
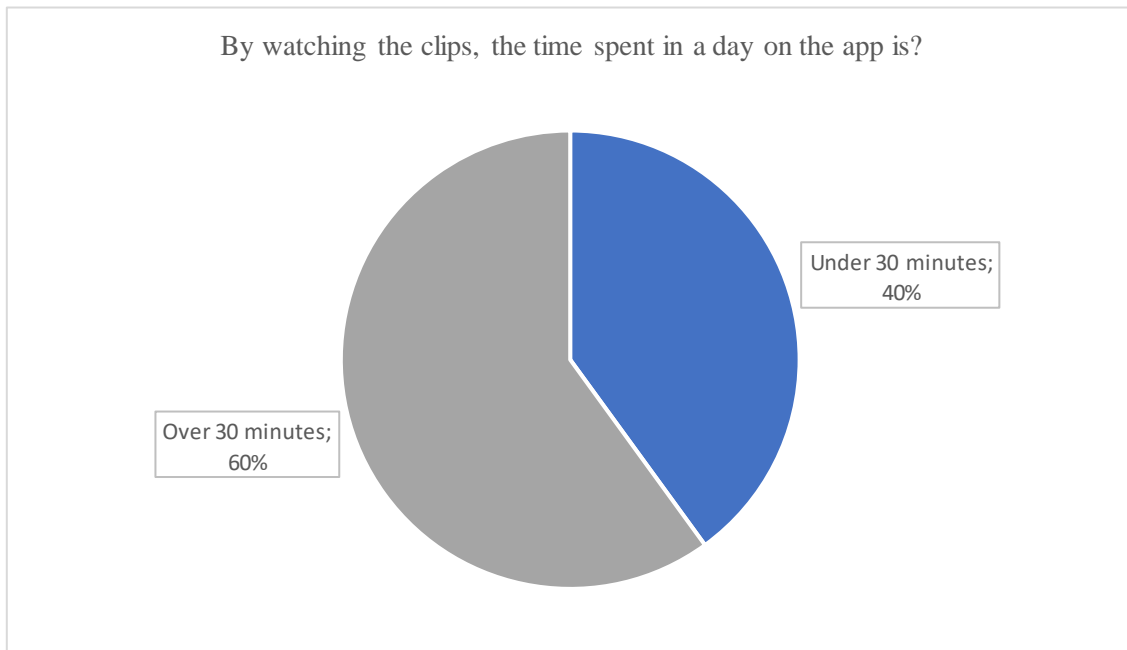
***Chart 2***: *Interpreting survey results from question 2*

Question number three aimed to identify the behavior of the adolescents after watching videos on the TikTok application. 38% of the interviewed students stated that they usually left assessments or comments for the watched videos, and 62% stated that they only watched the videos without leaving assessments or comments about them.

Do you want to leave comments or likes to the clips you watch?

Yes
38%

No
62%
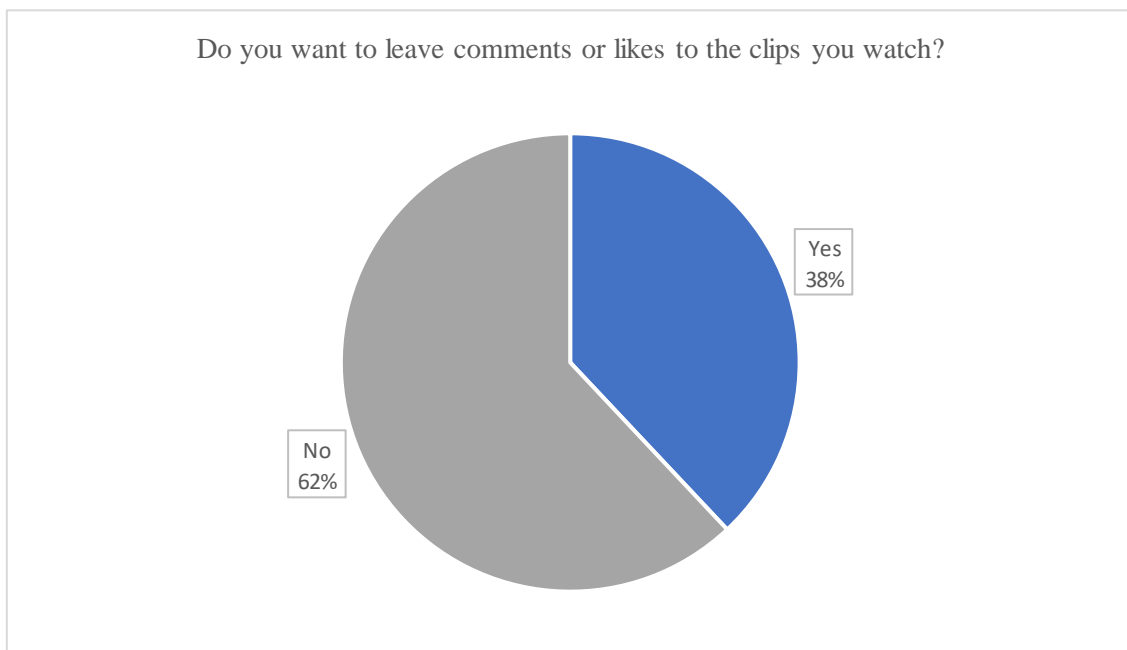
***Chart 3***: *Interpreting survey results from question 3*

Question number four meant to identify whether the pupils have watched inappropriate videos that might have involved physical injury or racial discrimination. 62% of teenagers stated that they watched such videos, and 38% said they did not watch.
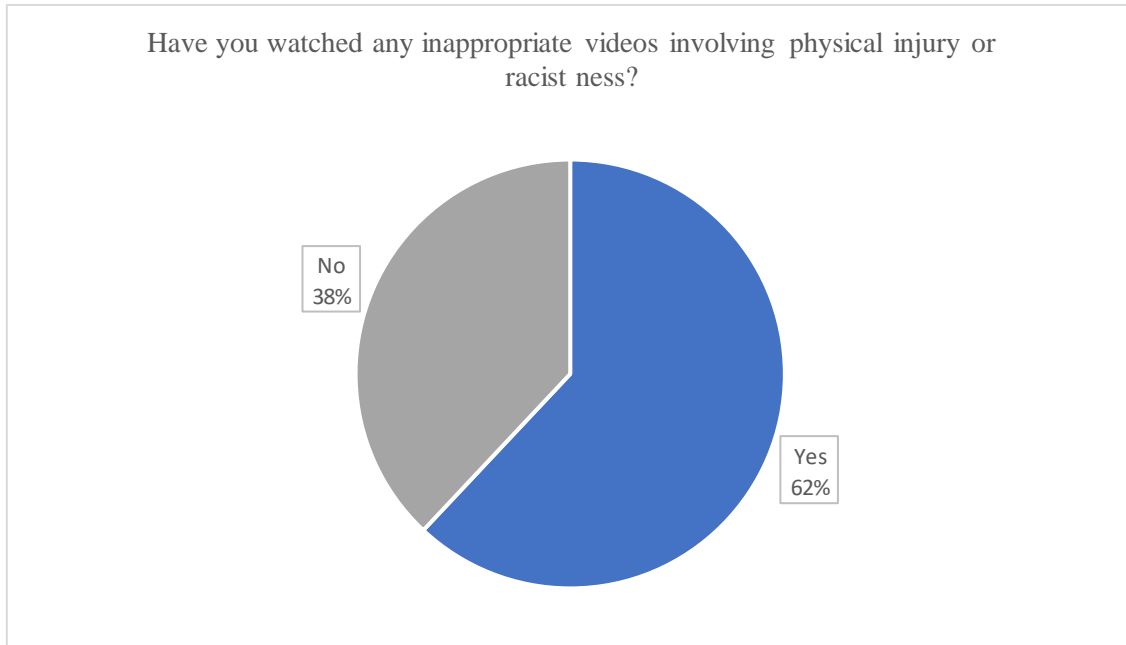


*Chart 4: Interpreting survey results from question 4*

Question number five meant to identify whether adolescents were watching videos on the TikTok app or they were actually participating by posting videos. 32% said they watch but also post videos on the TikTok application, and 68% said they only watch.
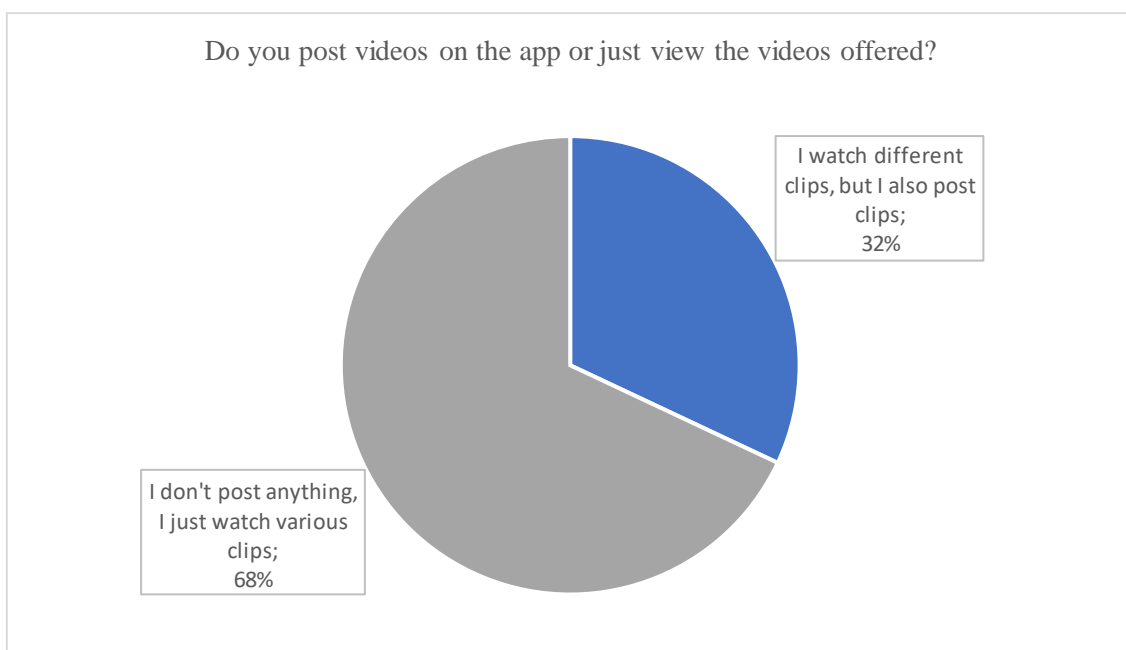


*Chart 5: Interpreting survey results from question 5*

By asking question number six, we wanted to get feedback from teenagers about the TikTok application, on the use of short videos for educational purposes. 60% of teenagers believed that the TikTok application could be used for educational purposes, and 40% of teenagers believed that the TikTok application could not use short videos as an educational tool.
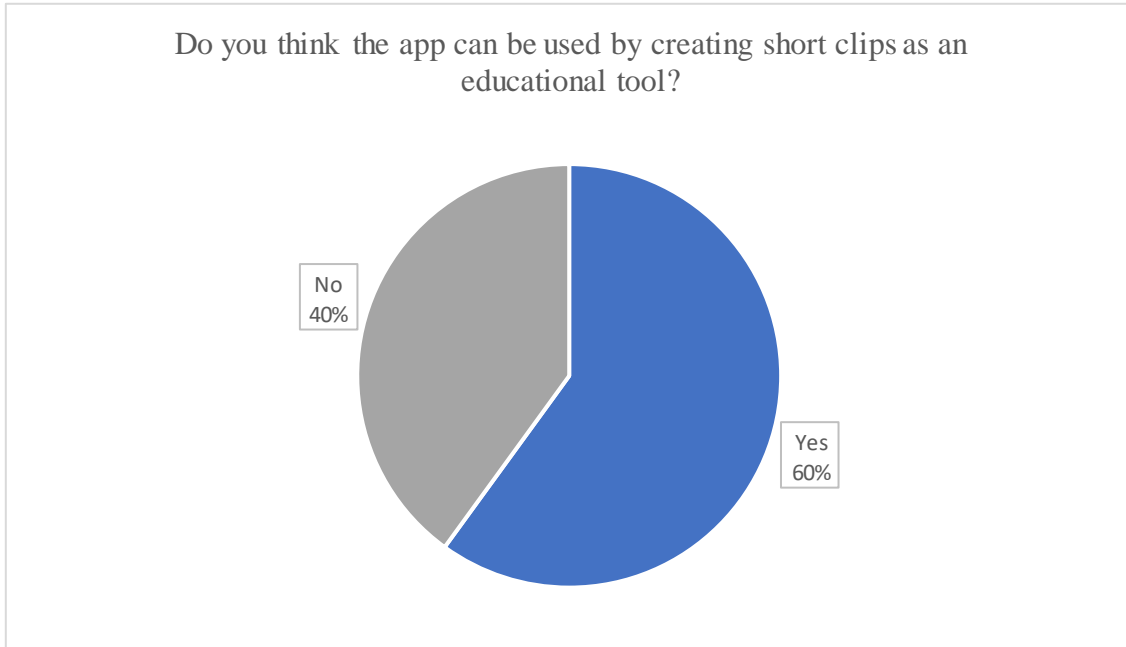


**Chart 6**: *Interpreting survey results from question 6*

In question number 7 from the survey, 100% of the interviewed adolescents agreed that the data be processed in order to obtain this statistic.
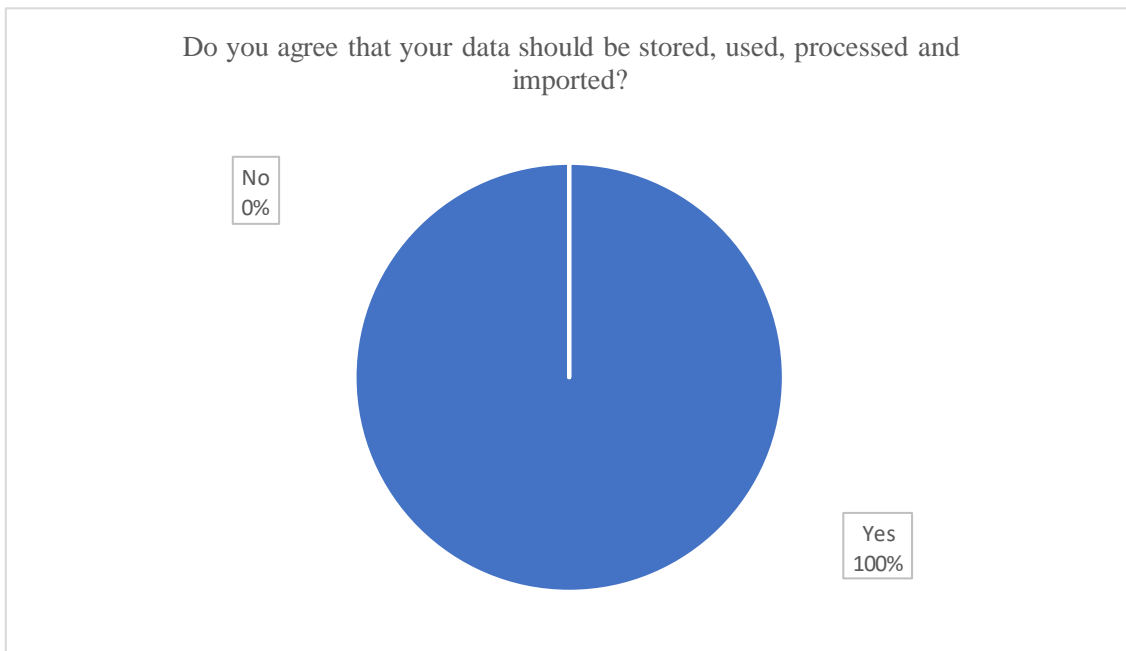


**Chart 7**: *Interpreting survey results from question 7*

**DISCUSSION**

The article makes a contribution by applying the questionnaire and interpreting the results, which makes us reflect, analyze the positive and negative effects of TikTok. It also deals with the argument of using TikTok as an educational tool. Analyzing the application and the whole package of functions it possesses, the problem of managing the time that people spend on this application by scrolling from one video to another still remains an issue. In order to reduce this time or to facilitate the viewing for educational purposes, it is necessary to create a study program, but also one for moments of relaxation. Thus, through an established program, the time allotted to the study may contribute to the improvement of school performance, and the time for viewing videos may be imagined for the relaxation moments and/or for reading the comments or for the chat corresponding to the videos.

In the article "Navigating the New Era of Influencer Marketing: How to be Successful on Instagram, TikTok, & Co." authors Michael Haenlein, Ertan Anadol, Tyler Farnsworth, Harry Hugo, Jess Hunichen, and Diana Welte describe TikTok as a 20-second attack to grab the attention of content consumers, this is especially favored among the young population. According to: (https://journals.sagepub.com/doi/10.1177/0008125620958166). With a huge user population, this application is a very effective means of marketing and promotion, the presentation of short videos in the form of advertisements implies a financial gain for companies promoting products or services on this application saving a lot of money compared to the promotion through television advertising.

**CONCLUSION**

TikTok may be used as an educational tool, but within limited limits, due to the length of the videos. This application has advantages, but also disadvantages that may predominate depending on the analytical ability of the person using the application, but also depending on the content they want to view. TikTok is currently an application for video content, intended for watching videos for fun. Due to the large number of users this application may be used for the promotion of products and / or service packages, the application being adopted for marketing. From an educational point of view, it is limited, and the current functionality of the application is not to favor the educational environment as a whole. The important thing is that by using the application, either for an educational purpose, or a marketing one or in other fields, its benefits should be fully exploited, while its disadvantages should be minimized.

Further efforts should be made to facilitate exchanges regarding the challenges and measures taken by Member States, including by connecting and improving the availability of databases containing open educational resources and the access thereof, in order to facilitate the exchange of different remote learning methodologies, tools and materials. In this context, to capitalize on existing opportunities, such as those available through eTwinning, the School Education Gateway platform and the e-Platform for Adult Learning in Europe (EPALE), to promote the use of self-assessment tools such as SELFIE and HEInnovate to support the capacity and digital transformation of schools and higher education institutions.

**BIBLIOGRAFY:**

**[1]** Brandon Doyle (January, 2021). TikTok Statistics. According toto: https://wallaroomedia.com/blog/social-media/tiktok-statistics/#:~:text=Total%20App%20Downloads%20%E2%80%93%20The%20TikTok,Tower%200n%20April%2029% 2C% 202020.

**[2]** Maryam Mohsin (September 2020). 10 TikTok statistics that you need to know in 2021 [Infographic]. According to: https://www.oberlo.com/blog/tiktok-statistics#5_TikTok_Usage_by_Country

**[3]** Michael Haenlein, Ertan Anadol, Tyler Farnsworth, Harry Hugo, Jess Hunichen, Diana Welte (2020) Navigating the New Era of Influencer Marketing: How to be Successful on Instagram, TikTok, & Co. According to: https://journals.sagepub.com/doi/10.1177/0008125620958166

**[4]** Sonika Garg (May 2020) TikTok Latest News: How it's affecting Youth and teen negatively. Conformable: https://techzimo.com/tik-tok-negative-impact/

**[5]** Florin POP, (2017). 20 reasons to use the Google Classroom app. According to: https://www.eduapps.ro/blog/20-de-motive-pentru-care-sa-folosesti-aplicatia-google-classroom/

# POLICE TRAINING TO POLICE EDUCATION:
# A PARADIGM SHIFT IN POLICE CURRICULUM

**Prof. Ph.D. Sudhakar VENUKAPALLI,**
The English and Foreign Languages University Hyderabad,
INDIA,

E-mail: sudhakarvenu.efluniversity@gmail.com

## ABSTRACT
*Police Education and Training is central to the successful realization of the constitutional democracy and protection of human rights. An attempt is made in this paper to evolve a curriculum framework for a people-sensitive Police Training and Education. One of the important objectives of this framework is to search for quality, standards, guidelines, and a general conceptual platform for improving basic Police Education and Training. This paper also aims at identifying general curricular parameters related to the development of a culture of policing, making policing practices more democratic and public-oriented to ensure greater security and more effective crime prevention. This paper argues that it is illogical, detrimental, and undesirable to separate police training from police education. Since policing is a highly respected professional field like medicine, it is imperative to integrate knowledge about society, dynamics of social and geopolitical spaces and human development from the complex socio-political perspective with police ethics and social and civic responsibilities and so on. In conclusion, this paper shows how people-sensitive and philosophically sound curricular policy for police education would serve people, communities, and societies. The ideas and insights in this paper are derived from the best practices available in the country and across the globe.*

**Keywords:** *constitutional values; policing; police curriculum; police education; police training; and police education;*

## INTRODUCTION
Police training in India is a colonial legacy greatly embedded in the western system of police and law enforcement. Control and domination are intrinsic and central parts of the institutional disciplinary structures of the police system. The structures and practices of the institutions of police training are designed on the western models of policing. Police training institutions are strongly committed to the Western beliefs; and certain cultural ethos, which compel them to transform diversity, multiplicity, and complexity into homogeneity and uni-dimensional thought. Being de-contextualized the universal approach in police thinking, functions, duties and practices indicates the philosophy of dominance and control in Indian police training.

The disciplinary practices of the police training system with its linear, clinical, ruthless, and rationalist modes of thought failed to recognize the multidimensional, pluralistic, indigenous lifestyles of the Indians and their diverse cultures. Such deep-rooted corrective practices have been continued consistently resulting the police system blind to the social and historical factors of the society. In addition, the corrective and punitive practices and knowledge gained over the years of formal training is progressively becoming

detrimental and destructive in accounting the real life situations and in addressing the concerns and problems of the people (Sudhakar, 2019).

The crises in the Indian policing system cannot be resolved until one innovates alternative rational reconstruction processes and thinking, which diminish the gap between the official and prescribed institutional structures of training and social realities and experiences. The rethinking desires a thorough and deeper examination of the conventional established notions of training practices and police education. This workout would empower the system to evolve an eclectic and realistic police-training framework to address diverse issues, with particular reference to including women and children.

Having some knowledge and an understanding about the legality is not sufficient. Police trainees need to go beyond such technical know-how and digest the socio-economic and cultural realities of the people and communities whom they are expected to serve. Criminal justice training is also not enough; but the trainees need to acquire abilities to solve day-to-day problems in the social life. Thus, this discussion makes one realize the significance and necessity of the exploration for a new vision towards Police Training and Police Education Policy.

In the recent past, Police Training has emerged as a distinct and significant dimension of the total framework of Law Enforcement. The continuous influence of socio-economic-political changes and techno-scientific ramifications of quotidian living, in both urban and rural communities, on the institutions of police and police training is deep and profound. The United Nations Document on Policing -2006 makes a perceptive observation on this subject:

*Policing is the most obvious and apparent aspect of the criminal justice system and a well-regarded police service is a prerequisite for the positive perception of justice. The way in which policing is delivered will depend on a host of variables including the prevailing political and cultural doctrines as well as the social infrastructure and local tradition. Approaches to policing vary between those based on a high level of control, sometimes characterized by confrontation, through to those emphasizing the merits of* **'policing by consent'**. *The former is usually highly centralized, predominantly reactive, and militaristic in its style. The latter may still be centralized, but will interpret policing as being responsive to local communities in the identification and resolution of policing issues.*

Several policies have been introduced and steps taken by the Indian State in partnership with various UN Organizations for the professionalization of police training and to raise its standards. Despite many interventions at a higher level, the current position of police is not acceptable and suitable to the Indian context. The police training has not yet become people-centric and community-oriented. Hence, it is necessary to rethink and judiciously reflect on the norms, rules, and assumptions of policing and basic foundations of the police practices.

Policing is, perhaps, the most difficult profession, and it is more so now, than ever before. The Police represent the civil authority of the government. The Policing includes maintaining order among the public and its safety; preventing, detecting and investigating criminal activities and enforcing the law. In many countries, the governments delegate and entrust licensing and regulatory powers to the police (Brodeur, 2020). According to the United Nations Policing (2018), it is the police system, which should protect the society:

*Whether at the national or local level, policing, when undertaken effectively and within a legal framework based on the rule of law, is a key element in building peaceful and prosperous societies. As the most visible representatives of the State, the police play a key*

*role in ensuring sustained peace and development by preventing, detecting and investigating crime, protecting persons and property and maintaining public order and safety.*

The idea of policing has undergone significant transformation in the twentieth century socio-political history. Policing is construed differently in different countries. The growing neo-liberal economic and market conflicts, disorders and complexities are driving and compelling the governments to introduce new policies for some systemic structural reforms, restructuring of organizations, expansion of institutions and functions of the police.

Besides its narrow and focused functions concerned with arresting crime and controlling violence, the police protect the authority of law and government. The invisible informal social role of police in the society is its hidden and underlying broader processes of social regulation and reproduction that govern everyday lives (Michael Rowe, 2017). Hence, the role of the police is not just crime control and law enforcement but it is essentially an order-maintenance machinery and the latent role of policing is manufacturing consent and human consciousness.

Policing is everywhere. Policing is not just confined to the elimination of crime, violence, and corruption. Police play a covert and hidden function. People experience their presence in all walks of their life. The primary function of today's police is not just controlling but managing issues and events. Through constant surveillance regulation and normalization, the police embrace disciplinary procedures and bio-political functions (Johnson, 2014). In his classic work ***Discipline and Punish*** (1977), Michael Foucault states:

*But, although the police as an institution were certainly organized in the form of a State apparatus, and although this was certainly linked directly to the centre of political sovereignty, the type of power that it exercises, the mechanisms it operates and the elements to which it applies them are specific. It is an apparatus that must be coextensive with the entire social body and not only by the extreme limits that it embraces, but by the minuteness of the details it is concerned with. (Foucault, 1977: 213)*

For Foucault the modern police power is a decentralized and extensively enwrapping the entire social life through its intensive capillary surveillance and its institutional disciplinary practices. Understanding policing from Foucauldian analysis enable one to see the deeper and hidden meanings of policing and its civilizing role. The focus of this paper is to present the complexities and multi-faceted roles of policing and not to discuss the theories of policing.

Article 246 of the Indian Constitution clearly states that Police is a state subject. It means that States in the federal India have the responsibility to create the police force for maintaining order, peace, and the enforcement of law. Further, by placing Public order, Police, Prisons, Reformatories, Borstal and other allied institutions in the State list, the Indian Constitution highlights the sole obligation of the States in formulating guidelines, rules and regulations for the Police and their development. Hence the organization and working of Police are governed by the rules and regulations framed by the State governments. In other words, police, policing and various matters pertaining to police basically fall into the jurisdiction of the respective State governments.

The Constitution of India also authorizes the Union Government to establish the central police organizations for the purpose of extending advice, guidance, support, and assistance to the States in dealing with the crime, law and order and other related matters. This provision allows the Union Government to work with States and play counseling and coordinating role, maintaining order and enforcement of law (Seventh Schedule of the Constitution of India).

**The Indian Police Act 1861**, which was legislated by the British, is the basic background framework for all the police policies and legislations of the Indian States. By and large, all the States of India have their own guidelines, manuals, procedures, rules, and regulations at present. All the State acts are designed and modeled upon the Police Act, 1861. Drawing insights from this act, the Union Government and most of the States established Police Training Colleges/Institutions at different levels. In this paper an attempt has also been made to critically assess the present status of police training in the country and suggest a few modifications to improve the quality of policing.

The Police System in India is one of the largest law enforcement mechanisms in the world. Its contributions and sacrifices in the enforcement of laws, preventing crimes, responding to emergencies, providing support services, and by and large, in strengthening democracy and protection of the Constitution is invaluable and deserves high appreciation. However, the impact of the police on the lives of the vulnerable sections of the society has not been positive, supportive, or encouraging. Furthermore, it has been discriminatory, detrimental, and counterproductive. Despite several interventions and reforms in the policies and police training, the Indian police system could not gain adequate public recognition and support. People in India still believe that the police mistreat people, especially the weaker sections, women, and children. These perceptions of the common people about the police are very frustrating and disconcerting (Pandey and Singh,2006; NHRC, 2007-08; Amnesty International , 2012).

Indian Police System is rooted in the European models of policing. Authority and power are the main characteristics of this system. Besides this, male domination and patriarchal values regulate the day-to-day functions and perceptions of the system. Print and electronic media often report how police mistreat, abuse, intimidate, terrorize people, tamper evidence, and violate duty and law. Most importantly, the police misconduct in using undue or excessive force against civilians and also in mishandling cases of women and children are widely shared and discussed. Women and children are most disturbed and affected by such violent organizational disciplinary practices. For many civilians, the police appear as oppressors, rather than protectors or enforcers of law. Research studies conducted by the national and international organizations like NHRC, Amnesty International, United Nations, HRW etc. on police and law enforcement found the failures of the police in investigating crimes, arresting on false charges and illegal detentions, torture and ill-treatment, etc. (Ghosh ,1993; NHRC 2007-08; Human Rights Watch, 2009). There are several valuable studies that track police excesses towards civilians, particularly women and children in dealing with their cases and addressing their issues (ACHR, 2011). The experiences of crime victims and their real-life stories clearly show how police behave with women and children and the psychological and social distance they promote in the minds of people to exercise their power and authority (Palmitto and Prabha, 2011).

In India, women generally do not report rape or register their cases because of social stigma, fear of police and threat of retaliation by the accused. The conviction rate in rape cases is dismal and long pending cases in courts of Law are discouragingly numerous. The United Nations Human Rights Report, 2018 observes: *"Women survivors of violence along the justice chain are often required to wait long hours at police stations. They are also interrogated numerous times by male police officers, examined by male forensic officers, treated disrespectfully, and deprived of privacy when being interrogated and providing statements."* Thus, millions of cases go unreported because of the unpalatable social stigma, unhelpful attitude of the police and unsavory attitude of the society. Crimes against women

include rape, murder, molestation, dowry harassment, domestic violence, and indecent comments both within and outside the house, stripping, and so on. The above facts indicate that in India, women and children do not enjoy their fundamental rights provided by the Constitution of India (ACHR ,2011; Kishwar and Vanita ,1999). These alarming facts call for immediate steps to be initiated to safeguard the rights of women and children.

In 2012 the Government of India appointed a Three-member Committee under the Chairmanship of Justice JS Verma, the former Chief Justice of India, and assigned the responsibility of review and possible amendments of Criminal Law to deliver faster trial and awarding strict punishment to the criminals committing sexual violence and offenses of extreme nature against women. According to the Commission, the root cause of sexual crime is the *"failure of governance."* Pointing its finger towards the governments, the Commission also made the police and even the public responsible for the apathy, indifference, and lack of concern. After intensive research and extensive consultations with various stakeholders, the Commission formulated its recommendations. Among them, two recommendations are highly relevant to the police training and they are presented below.

**1. Police Reforms:** To stimulate confidence in the public, the Panel gave the following suggestion: *"Police officers with reputations of outstanding ability and character must be placed at the higher levels of the police force."* The Panel felt the requirement and the imperative need for a moral vision among the police. The Panel strongly recommended that the *"law enforcement agencies do not become tools at the hands of political masters."* It also felt that *"every member of the police force must understand that their accountability is only to the law and to none else in the discharge of their duty."*

**2. Amendments to the Code of Criminal Procedure:** The Panel observed: *"The manner in which the rights of women can be recognized can only be manifested when they have full access to justice and when the rule of law can be upheld in their favour."* The proposed Criminal Law Amendment Act, 2012 should be modified, suggests the Panel. It states: *"Since the possibility of sexual assault on men, as well as homosexual, transgender and transsexual rape, is a reality the provisions have to be cognizant of the same."* JS Verma Commission highlighted the importance of protecting the rights of persons with disabilities, and most importantly, the obligation of the State to protect the disabled girls and women from rape and other crimes.

Drawing spirit from the Justice JS Verma Commission and other reforms introduced by the Government of India, an effort has been made in this paper to identify various aspects of effective police training to formulate a comprehensive framework for the basic training curriculum for the Police. It is felt highly desirable to evolve a broad framework of police training curriculum to enable the Indian police trainees to comprehend the complexities of the social realities of the country, existing challenges, and emerging problems. Police trainees need to understand the philosophical assumptions underlying Indian Constitution and the principles of democracy and social justice. Most importantly, as the citizens of the country endowed with power and discretion, they must respond to the growing inequalities and root out injustices in all the aspects of public life. Police trainees have to imbibe the ethical and moral values enshrined in the Indian Constitution and emerge as enlightened leaders of human values and love for peace.

One of the important assumptions of this framework is that the knowledge and understanding of complex socio-cultural dynamics of the Indian society is crucial for developing individual and social intelligence of the police trainees. Preparing police trainees for conscientious social responsibility, critical citizenship and making them able to

comprehend global interrelationships, including the vital connections among the past, present and future is imperative in the present context.

## 1. CRITICAL REFLECTIONS ON POLICE TRAINING

Except in a few countries, the word "police training" is the more popular than "police education." Police education and police training are not uniform across the countries. Very few countries have recognized the importance of police education and its significance to law enforcement and policing in the appropriate manner. In New Zealand the police training and police education are separate; and in Norway, a 3-year program is carried on. It includes some components of higher education and also some practical police training. In many countries like England and Ukraine, the foundations of police training are rooted in the study of law and criminology. Police studies at higher education level are very popular in Germany. In the most advanced countries like the United States of America, the police education and police training are also separated. There are several universities in the USA, which offer police studies and police education courses; but, police training, by and large, is confined to police academies (Cordner, 2019).

In India, police training is the only dominant institutionalized model. Police studies have not gone beyond official police academies and training schools. In India, a few universities that offer law studies have courses in criminology and criminal justice-related subjects. From the beginning, the institutions established for police training are isolated from the "real world." Training and instruction largely takes place in closed campuses of the police training colleges where the trainees are accommodated as residential trainees. Such physical separation from the people and isolated training practices, without the interaction with the common people during training, make them hard, unresponsive, and insensitive towards others and isolates them from the very communities they are supposed to serve later. Drilling and marching for physical fitness dominate the overall pedagogy and training without any attention to or understanding of the proper use of their abilities for the benefit of their clientele. Practices that encourage autonomy in learning, thinking and creating are not encouraged. Police training is, thus, reduced to skill training.

Police are delegated with discretionary powers and are expected to employ them judiciously; but in reality, it is very rarely reflected in training programs and also outside (Osse, 2007). A few common problems associated with the conventional training methods are: training in closed settings; absence of community involvement; wide gap between theory and practice; marginalization of human rights, gender and cultural awareness training and limited scope for external criticism and social auditing. Police training schools are not known to undertake critical reviews and auditing. Further, it is observed that training takes place mostly in workshop mode and the emphasis on perspective development is almost negligible. Professional and trained faculty is not available in most of the institutions for effective pedagogical transaction. The available training material is not reader-friendly and not much emphasis is given for the production of quality material. In police training programmes there is a wide gap between theory and practice. Most importantly the *"Spirit of the Law"* and cultural sensitivity and social awareness are often absent in the training. Exclusive use of paper-pencil examinations for academic areas is another important limitation in the police training.

In the police training schools, lecture method is the most often used dominant methodology of teaching. For David Pace (2000) aptly observes: *"Majority of police training institutions have rigid codes of behavior and expect trainees to learn these codes and follow*

*them without deviation. This type of organizational concept avoids the need to think out a response to individual situations. This method works only within a limited range of situations under close supervision."* To make them learn critical thinking skills it is imperative to use interactive methodologies and dialogic inquiry strategies.

The rigid organizational structures and authoritarian management styles in the policing system have been institutionalized as an appropriate and suitable model for modern policing. The institutional policies and practices restrict and neglect the contributions of many police intellectuals, creative and committed officers. The fruits of their constructive and creative thinking and their resourcefulness are not recognized or utilized by the system. Compliance to the age-old teaching practice in the police training institutions is detrimental to the very spirit of the duties, which the police system has to follow. Teaching and instruction are mostly prescriptive and directional. Trainees are often instructed and inscribed in the institutional disciplinary structures and discursive practices. The majority of tests used during the period are designed to assess the rote memory skills of the trainees (Pace , 2000).

## 2. POLICE TRAINING CURRICULUM

Across the countries, the dominant and official understanding of policing, positions the police training within the system of criminal justice. Therefore, the focus is on developing awareness about *"protecting life and property; prevent, detect, and investigate criminal offenses, misdemeanors and other contraventions under the applicable law; carry out court orders; direct and supervise traffic on public roads; seize items as required in accordance with the Applicable Law; monitor large public gatherings; assist in civil emergencies; protect designated individuals, premises, facilities, and areas; cooperate with and provide assistance to other legal authorities; maintain integrity and confidentiality of required information and personal data collected in the performance of its duties and; carry out any other duties prescribed by the Law"*(UN, 2006 ).

It is also about *"coordinating and working with the functions of probation and parole officers, jail and prison workers, juvenile counselors, prosecutors, judges, and vice versa, in order to make the criminal justice system operate more smoothly and effectively"* (Cordner, 2019). India is no exception to this.

It is observed that the curriculum of police training across the levels is ahistorical and decontextualized. People's welfare and the reasons behind poverty, crime, and exploitation are not explored and studied. Law enforcement is construed in mechanical terms. Not much scope is provided to explore the reasons behind the crime and solving problems. Understanding the genesis of crime is important to handle the crime or subvert the circumstances provoking crime. But such vital aspects are ignored in the police training. The structured and overloaded curriculum puts excessive and unwarranted stress on trainees and does not inspire and direct them towards effective learning or to support the community-policing mission. David Pace (2000) observes rightly: *"The curriculum is designed as competency-based, where recruits are required to perform a skill properly before being allowed to move on to other skills. Those areas that do not involve physical skills are dealt with primarily by the lecture method of teaching."*

As discussed above, Police training largely happens in closed, isolated, and highly secured areas of the institutions. Other than police personal no one is allowed into the premises of police training colleges. Since training takes place in such a quarantined environment and totally unconnected with the activities of people, it is difficult for the

graduated trainees to establish harmonious relationships with people and society after their training period. This is clearly evident in the increasing gap between what the police trainees are taught and what they are expected to do. What is important is not the mastery/obedience method, but how one motivates and develops the abilities of problem solving through self-exploration and meta-cognition. What is required is a sound pedagogy that teaches and motivates the trainees to improve their imaginative, innovative, and creative faculties, rather than the technique of mechanical memorization of information. David Pace (2000) elucidates what is needed to be trained in:

*"Modern police training should strive to empower the learner. The most important skills for recruits to learn are the ability to learn, think and solve problems in a self-directed manner. With these abilities, the trainees will be better able to address the changing needs of our communities. This kind of system is needed to adequately prepare police recruits for the coming generations."*

The police training system is very complex and multilayered. The design of the curriculum for such a multifarious police system is not a simple task; it is very challenging and involves intellectual inputs from many experts and various stakeholders. Police curriculum needs to be developed logically and systematically from the basic to a higher level, to different ranks of hierarchy in the police system. The nature, depth, and the content of the training differ from one level to another. Every level has to have a different syllabus suitable to the obligations, duties, and responsibilities of that rank. Academic teaching and training standards and benchmarks would provide meaningful direction for quality assurance in the transaction of the curriculum. Comprehensive and all-inclusive curriculum -- encompassing human relations, police behavior, shouldering the burden of the community, sensitization training, democratic values, and standards is extremely important to create an effective liberal democratic society.

A document of the United Nations on Policing (UN , 2006) throws light on the apparently imperceptible bond between the training and its actual utility in the profession: *"As in all organizations, service delivery is only as good as the quality and training of the personnel that deliver it. Policing agencies are no exception to this rule."* This document also raises a few important questions, which are presented below.

**A.** What foundation training is given to police recruits? Does the training focus on practical policing skills and ethical behavior (including Human Rights and corruption)? Are they trained in inter-personal skills? Are they trained in cultural awareness and diversity? When was the training program last updated? Is there training on community policing? What does it include? (UN ,2006)

**B.** Are individual officers able to describe any training they have received on integrity, accountability, and ethics? Do they know whom to consult if they have questions? Do they know how their internal affairs/complaints process works, if they have one? (UN, 2006)

**C.** How do peacekeepers address these issues in their training? (UN, 2006)

**D.** How often do officers receive refresher training? How are training needs assessed? How is it delivered - Via classroom, self-study, computer-based? Is there a minimum training requirement? Is training provided on control and restraint techniques, use of weapons, new laws, regulations, and procedures? (UN, 2006)

**E.** What other training opportunities are available (e.g. secondments or attachments to central units or to other agencies)? (UN ,2006)

To have for an effective, humane, and people-centric intelligent police education system, it is necessary to develop a relevant curriculum on the foundations of the Indian constitutional democracy. Curriculum for the police must be philosophically sound, sociologically imaginative, and culturally sensitive.

The issues and subject matter representing women and children are not adequately represented and transacted in the existing police-training curriculum. The task of selecting the appropriate subject matter to constitute a particular curriculum for police training is indeed a very complex and challenging one. It is observed that the selection of the content about women and children in the training is primarily based on the textual material/police manual and suggestions given by some judicial experts. By and large, it is arbitrary and subjective. There is no serious and thorough attempt to study the factors that condition and necessitate the police service. The overarching finding of the field observations and literature survey is that there are no substantive curricular planning and curriculum development processes in place. While many important issues of women and children are addressed in police training they are not linked to the overall framework of police education. And, how they are connected to the contemporary discourse on inclusion, social justice, and human rights issues is also not clear.

The issues concerning Women and Children comprise one of the weakest areas of the existing police training. It is observed that there is little clarity on the ground and decision making bodies like police academies about what should constitute the framework of the police training with special reference to women and children. There is no serious thinking about how to standardize the processes of curriculum construction to realize the objectives of women-sensitive and child-friendly police training.

There has not been any serious attempt to evolve an all-inclusive police training policy. A comprehensive police training policy would provide direction to the curriculum planners and developers to identify various issues and concerns. It provides a larger framework and space to design various activities and practices of police training. Since such policy is not available, the issues concerned with women and children are not satisfactorily and adequately presented in the police-training curriculum. Police training curriculum is not evolved in consultation with relevant groups and organizations, including different women activists and organizations, NGOs working for women and children, researchers and people from different institutions or social strata. Lack of such wide range consultations made the present training socially irrelevant and insensitive towards women and children. It is necessary to have very wide in depth consultations with all the stakeholders to understand their issues, problems, and their lifestyles. Such inclusive and continuous consultations would enable the police to identify the areas of concern for police training.

## 3. NEW VISION AND POLICY: POLICE TRAINING TO POLICE EDUCATION

As discussed above, the police training is primarily concerned with the development of competencies and capabilities that would enable transform and empower the police to meet the requirements of the profession and the expectations of the society. A cursory look at the existing police preparation would reveal that the police training processes, with a focus on skill training and drilling, convert police trainees as mechanics or technicians. The goals of training are narrow and the possibilities of getting connected with outside world is very much limited and constrained. Therefore, it is necessary to turn the focus from police training to police education. In other words, the focus of police preparation has to shift from

training to education if it is to make a constructive impact on the quality of the police workforce and the larger socio-cultural transformation.

The central idea of police education lies in its philosophical assumptions of curriculum and its design, construction, organization, including transaction approaches as well as the extent of its relevance. The foundations of any police training must be a conceptual blend of ideas of different cognate liberal disciplines. Police preparation must emphasize and develop social sensitivity towards the contemporary issues and problems; understanding about the diverse cultures and needs of different communities and social groups; broader philosophical perspective and critical approach to dominant knowledge and practices; positive attitudes and the degree of commitment to the profession; understanding about the constitution, democracy and social justice; motivation and passion for the welfare of the people; professional skills and personality and critical perspective to continuously evaluate the underlying relationships among power, knowledge, authority and social justice.

While joining the police, the trainees bring along with them certain dogmas, attitudes, opinions, beliefs, values, promises, dispositions, temperaments and ethical characters from their upbringing, schooling and social milieu. This upbringing and experiences powerfully impact their discernments, sensitivities, perceptions, understanding and professional skills. Police training must enhance and hone their skills and enable them to critically evaluate their beliefs and values. They must acquire adequate knowledge, skills, interests, and attitudes to realize their responsibilities as the torchbearers of social justice and upholders of constitutional and human rights.

The police system has to become more responsible towards welfare of the people and take care of their peaceful coexistence. The system should respond positively to the changing circumstances, social demands, and needs and to the day-to-day life events, especially towards the increasing violence against women and children. The Police Training and Police Education would enable the police personnel to take care of the women and children, who should live with harmony within themselves and with the external nature and social environment; understand women and children within their economic, social, cultural and political contexts; develop social sensitivity, consciousness, finer human sensibilities and character to function as responsible citizens; own responsibility towards society, zeal for social reconstruction and work towards building a better society and promote peace, democratic way of life, especially practicing constitutional values of equality, justice, liberty, fraternity and secularism.

As argued above, the existing practices in Police Training are mostly focused on the training techniques and skills rather than producing valuable positive behavioral and attitudinal transformation among the police trainees. Therefore, it is imperative to address and negotiate with their background knowledge, mindsets, and their perceptions about women and children. The training should also enable them to construct meaningful images based on the principles of equality, fraternity, and liberty. This is not possible with the existing police trainers alone. No doubt, the role of the police educators is crucial and important. Police educators and senior police officers, under whom the trainees work, must be very broad in their democratic outlook and egalitarian perspective. Hence it is essential to plan and prepare police educators who, in turn, can train the police trainees as per the changing mandates and societal needs. The system needs to build a strong force of professionals as Police Educators drawing from different intellectual and social backgrounds and from different professions. Additionally, professional standards of training and delivery need to be evolved.

The curriculum of police training and education need to be designed and instituted on the foundations of democratic principles, experiential learning, and liberal studies in education and developments in other emerging disciplines of knowledge. In this context it is important to understand various international experiences across the world and seriously examine the UN reports on Police and Police Training. A few UN documents (UN General Assembly 2006; AID 2008; UN 2013) recommended the following principles for designing a child-friendly and women sensitive police-training curriculum: *police curriculum and training must consider adopting a human-rights based approach; operating under ethical guidelines; ensuring gender-responsiveness; respecting child rights, employing culturally appropriate measures; responding to diversity; operating within the ecological model and working in partnerships.*

The course content needs to be radically transformed and redesigned. Besides an emphasis on law, there should be an adequate focus on sociology, political science, women studies, cultural studies, economics and poverty studies, human development studies, including the study of the constitutions of different nations. The curriculum should take into account the recommendations of various non-governmental organizations and other institutions working for the development of the people and the police. It should also be highly flexible to deal with current issues and changing life styles. There should be an emphasis on the development and inculcation of compassion, commitment, social skills, positive attitudes, and human values with an understanding of policing as a social responsibility.

Police education should be construed in terms of building competencies in police trainees to create knowledge, meaning, and value from their subjective experiences, to understand different backgrounds and to cultivate relevant capabilities to distinguish and appraise in moments of uncertainty, fluidity, and indefiniteness.

The official understanding of the police system considers police training as a training problem. According to this model of policing, the goal of police training is to deposit certain clearly evident laws, doctrines, principles and knowledge into the minds of police trainees through standardized, homogenized, context independent objective training techniques and methods. Hence, what exactly a trainee is supposed to know is a catalog of laws and codes in addition to the performance of a set of defined disciplinary practices and drilling trainings. Such established official model of police training has failed to create peace and harmony in the Indian society and failed to win the public trust and appreciation. Hence, it is imperative to replace such lifeless, mechanical, coercive and suppressive understanding of the police training by more humane, people-centric, general welfare and service oriented democratic system of police education. Further, the alternative to the dominant view must consider police training as a public policy problem.

**CONCLUSION**

From the above discussion, it is clear that the police training need to be viewed with a policy approach and the policy factors need be considered must be broad structural arrangements; supply and demand; and regulations of police system and training, including recruitment, employment, preparation, training, retaining strategies, selection of curricular content or subject matter, field requirements, testing, outcomes and so on. The views and responses of the public and different stakeholders are crucial on such critical and fundamental parameters to formulate a policy on the police training and police education. Moreover, the basic argument of this paper is not to view police training policy merely in

terms of economic and financial allocations, but to consider the police training policy as the political space comprising the struggles over ideas, ideals, competing goals, values, and notions about what constitutes public and private interest. Police education should be deeply grounded in liberal education with analytical and critical perspectives on policing. Such understanding would allow us to place police training in the larger social and political structures within which it is embedded. To realize the goals and objectives of the constitution, one must go beyond police training and design the curriculum for Police Education in order to create a better world for children, women and others, particularly the disadvantaged sections of the society.

## ACKNOWLEDGEMENTS:

## BIBLIOGRAFY:

[1] Abrahams, C., and R. Mungall. (1992). *Runaways: Exploding the Myths*. London: National Children's Home.
[2] Australian Agency for International Development (AAID). (2008). *Violence against Women in Melanesia and East Timor: Building on Global and Regional Promising Approaches.* Commonwealth of Australia, Canberra
[3] Amnesty International (2012). *Report of Amnesty International*-2012.
[4] Asian Centre for Human Rights (ACHR) (2011). *Torture in India-2011, Annual Report*, New Delhi.
[5] Birzer, M. L. (1999). "Police Training in the 20th Century." *FBI Law Enforcement Bulletin,* 68, 16-20.
[6] Brodeur, Thomas Whetstone Jean-Paul(2020). "Police" , in *Encyclopaedia Britannica* , Chicago: Encyclopaedia Britannica, Inc.
[7] Buerger, Michael (2004). "Educating and training the future police officer." *The FBI Law Enforcement Bulletin*, January Issue.
[8] Chakrapani, C. (1994). *Changing Status and Role of Women in Indian Society*. New Delhi: M.D. Publications.
[9] Cohen, Howard S., and Michael Feldberg (1991). *Power and restraint: The moral dimension of police work.* Westport, CT: Praeger Publishers.
[10] Cordner, G. (2016). "The unfortunate Demise of police education". *Journal of Criminal Justice Education*, 27, 485–496.
[11] Cordner, Gary (2019). "Rethinking police education in the United States", *Police Practice and Research –An International Journal,* Vol.20, NO.3, 225-239
[12] Counts, D., J. K. Brown, and J. Campbell (1999). *To Have and To Hit*. Chicago: University of Chicago Press
[13] Cross, T., D. Finkelhor, and R. Ormrod (2005). "Police Involvement in Child Protective Services Investigations: Literature Review and Secondary Data Analysis", *Child Maltreatment,* 10(3): 224–244.
[14] Cross, T., W. Walsh, M. Simone, and L. Jones (2003): "Prosecution of Child Abuse: A Meta-Analysis of Rates of Criminal Justice Decisions", *Trauma, Violence, & Abuse* 4(4):323–340.
[15] Delattre, Edwin J. (2006). *Character and Cops: Ethics in Policing* (5th ed.). Washington, DC: The AIE Press
[16] Dhanoa, Ritu (2012). "Violation of Women Human Rights in India". In *International Journal in Multidisciplinary and Academic Research,* Vol. 1, No. 4
[17] Fogo, Bradley(2010). *What every student should know and be able to do: The making of California's framework, standards, and tests for history-social science*, Unpublished Thesis, Stanford University.
[18] Foucault, M. (1977). *Discipline and Punish*. New York: Vintage Books.
[19] Gaines, L. K., Southerland, M. D., Angell, J. E.(1991). *Police Administration.* New York: McGraw-Hill.

[20] Ghosh, S.K. (1993). *Torture and Rape in Police Custody: An Analysis*. New Delhi: Ashish Publications, p. 42

[21] Government of India . (2013). *Justice JS Verma Commission Report*, New Delhi: Govt.of India publications

[22] Heise, Lori(1998). "Violence Against Women: An Integrated, Ecological Framework", *Violence Against Women*. 4 (3): 262-290.

[23] Human Rights Watch (2009). *Annual Report-2009*, New York

[24] Johnson, Andrew (2014). "Foucault: Critical Theory of the Police in a Neoliberal Age" , *Theoria*, Issue 141, Vol. 61, No. 4, p.5-29 ; doi:10.3167/th.2014.6114102

[25] Kishwar Madhu and Vanita Ritu (1999). *In Search of Answers: Indian Women's Voices from Manushi*. New Delhi: Manohar Publications

[26] Mastrofski, Stephen D., et al. (2001). *The Public Image of the Police.* Final Report to the International Association of Chiefs of Police by the Administration of Justice Program, George Mason University.

[27] Mayers, M.(2001). *Street Kids & Streetscapes: Panhandling, Politics, & Prophecies.* New York: Peter Lang.

[28] National Human Rights Commission (1993). *Guidelines regarding the arrest of females in India provided by NHRC under Protection of Human Rights Act-1993* ,New Delhi: NHRC

[29] National Human Rights Commission (2008). *Annual Report 2007-08,* New Delhi: NHRC

[30] Oliver, W. M. (2016). "Celebrating 100 years of criminal justice education, 1916–2016." *Journal of Criminal Justice Education*, 27, 455–472.

[31] Osse, Anneke (2007). *Understanding Policing: A Resource for Human Rights Activists.* Amsterdam: Amnesty International Nederland

[32] Pace, Jack David (2000). *Pedagogical Methodologies in Teaching Critical Thinking Skills to Basic Police Recruits at Madison Area Technical College*, Unpublished Thesis, Wisconsin: University of Wisconsin-Stout.

[33] Palmer. S.H.(1988). *Police and Protest in England and Ireland, 1780-1850.* Cambridge: Cambridge University Press

[34] Palmitto Michael, J. & Unnithan N. Prabha *(2011).* Police and Society: A Global Approach New York: Cengage Learning, p- 158.

[35] Pandey, S. P., and Singh, K. R. Awdhesh (2006). *Women Prisoners and Their Dependent Children.* New Delhi: Serials Publications, p. 19

[36] Roberg, R., & Bonn, S.(2004). "Higher education and policing: where are we now?", *Policing: an International Journal of Police Strategies & Management*, 27, 469–486.

[37] Rowe, Michael (2017). *Introduction to Policing*, 2nd Edition, London: Sage, p 3-4

[38] Siddique. E. Fatima and Ranganathan, Sarla (2001). Handbook on Women and Human Rights, New Delhi: Kanishka Publication, p-524

[39] Southerland, M. D (2002). "Criminal justice curricula in the United States: A decade of change". *Justice Quarterly*, 19 (4), 589–601.

[40] Sudhakar, V. (2019). "Culture Sensitive and Child Friendly Curriculum Framework for Tribal School Children", *Journal of Education and Cultural Studies*, Vol.3, No.2,

[41] Swamy, A., et al. (2001). "Gender and Corruption." *Journal of Development Economics,* 64(1): 25-55.

[42] Thompson, Dennis F.(1992). "Paradoxes of government ethics", *Public Administration Review* 52: 254-59.

[43] Trajanowicz, R., Bucquerouz, B. (1990). *Community Policing: A Contemporary Perspective*. Cincinnati, OH: Anderson Publishing.

[44] United Nations (1994). *Report of Special Rapporteur of the United Nations Organization's resolution* 1994/45, Adopted on 4/March/l994.

[45] United Nations (2006). *Policing: Public Safety and Police Service Delivery –Criminal Justice Tool Kit,* New York: United Nations

[46] United Nations (2013). *Ending Violence Against Women and Girls: Programming Essentials*, New York: UN Women. 2013.

[47] United Nations Development Programme (2009). *Capacity Development: Our Approach, United Nations Development Programme.* New York: UNDP

[48] United Nations Human Rights Report (2018). *Ending Violence Against Women (Module3),* New York: UNDP&UNH

[49] UNIFEM (2010). *National Accountability Framework to End Violence against Women and Girls: 10-point Checklist* New York: UNIFEM.

[50] United Nations General Assembly (2006). *In-Depth Study on All Forms of Violence against Women: Report of the Secretary-General.* A/61/122/Add.1. New York: United Nations.

[51] UNFPA (2005). *State of the World's Population. United Nations Population Fund 2005*, New York: UNFPA.

[52] UNICEF (1999). *Women in Transition, The Monee Project, Regional Monitoring Report*, No.6. New York: UNICEF

[53] United Nations Policing (2018). *Report of the Secretary-General submitted to the United Nations Security Council* on 31 December 2018. New York: UN

[54] Veer, Udai (2004). *Crime against Women,* New Delhi: Anmol Publications Pvt. Ltd.

[55] Wade, J., and N. Biehal (1998). *Going Missing: Young People Absent from Care*. Chichester: Wiley. UK.

[56] Walby, Sylvia (2004). *The Costs of Domestic Violence, Women, and Equality Unit*. Leeds: University of Leeds.

[57] Yodanis, Carrie, and Alberto Godenzi (1999). *Report of the Economic Costs of Violence Against Women,* Fribourg: University of Fribourg.

# BOOK REVIEW

## EDUCAȚIA DIGITALĂ [DIGITAL EDUCATION]
### Polirom Publishing House, Iași, 2020, 374 pages
### Coordinators: Ciprian Ceobanu, Constantin Cucoș, Olimpius Istrate, Ion-Ovidiu Pânișoară

**Lect. Ph.D. Elena-Ancuța SANTI,**

Teacher Training Department, Valahia University Targoviste
ROMANIA

E-mail: santi.anca@yahoo.ro

The volume *Educația digitală [Digital Education]* (2020), published by *Polirom Publishing House* (Iași), is the result of a new and necessary collective effort in the times when the Romanian school is going through the global pandemic context and is trying to identify the most efficient solutions to continue the teaching process and to realize it at higher qualitative standards.

The coordinators of this work are well-known personalities in the domain of Educational Sciences, with vast experience, with vision and innovative spirit, authors of books, studies and research works, prize-winning, being appreciated by the academic community, actors with an important role in the process of elaboration of educational policies on a national level and vectors of the promotion and realization of quality in education: Univ. Prof. Ph.D. Ciprian Ceobanu - from the Teacher Training Department, Faculty of Psychology and Education Sciences, "Alexandru Ioan Cuza" University of Iași; Univ. Prof. Ph.D. Constantin Cucoș - from the Teacher Training Department, Faculty of Psychology and Education Sciences, "Alexandru Ioan Cuza" University of Iași; Assoc. Prof. Ph.D. Olimpius Istrate - Teacher Training Department, Faculty of Psychology and Education Sciences, University of Bucharest; Univ. Prof. Ph.D. Ion-Ovidiu Pânișoară - Teacher Training Department, Faculty of Psychology and Education Sciences, University of Bucharest.

As the coordinators confess - even from the *Introduction* section -, the volume *Digital Education* represents "*the realization of an older project concerning the impact and functionality of the new technologies on the training paths but, at the same time, also an answer to an urgent pressure to find solutions to the crisis of the recent months*" (referring to the impasse moment generated by the pandemic in education). In this context, the works integrated into the present volume become true indicative and formative milestones for the teaching staff, contributing - at the same time - to understanding the changes, challenges, limits but also opportunities that occurred with the integration of the new Information and Communication Technology in education and can facilitate the transition to the digitalization and modernization of the education system.

Realized in a scientific, rigorous, realistic manner and approach each problem in a complex manner, the studies and research work integrated into this volume offer departure points both to the subsequent research, opening directions of educational thinking and action, and to the applied, concrete practice from the school area. The interrogations and reflections that the authors start from are objective and pertinent, without offering, however, a negative perspective on the subject approached, although the new environment that education has moved into for a while - the online environment - requires adjustments and a gradual rethinking of the entire educational process, from the skills a teacher should possess, to the curriculum, to the strategies used, to the resources and time management and to the way the student can be motivated and involved the best way possible in his/her training and development process:

- „How and how much traditional learning is found in long-distance learning?"
- „How looks the *new normal* in education (considering that some types of activities can be *moved* permanently online while others cannot)?"
- „How do we eliminate or attenuate inequalities - concerning technological access or use - among the different categories of students: prodigy, with special needs, underprivileged, etc.?"

Digital skills become essential, and "*the curriculum must go through redefinitions and redimensioning of technical and pedagogical order, taking into account both features, intrinsic to the new learning framework (relocation of training, asynchronicity, increased autonomy of the trainee), and a series of parameters characterizing the larger, sociocultural context, in which education is realized*", affirms Prof. Constantin Cucoș (p. 260).

In the first part of the volume, *Sociocultural perspectives of the use of technology in education* are described. Thus, Univ. Prof. Ph.D. Ciprian Ceobanu opens the series of articles with the paper *Educational reconfiguring in the era of digital technology*; Univ. Lect. Ph.D. Simona Adam approaches the topic of *Generations in the change in the education system. The immigrants' and digital natives' digital skills*; Assoc. Prof. Ph.D. Silvia Făt realizes a synthesis centered on the educational effects of the *social networks* on students and teachers; Assoc. Prof. Ph.D. Roxana Ghiațău presents the aspects of *Ethics and technology in the educational context*. Other topics found in this part are *Risks and security in the use of information technologies in educational contexts* (Univ. Lect. Ph.D. Andrei-Lucian Marian), *Personal data protection and security in digital education* (Ph.D. candidates Adriana-Maria Șandru and Daniel-Mihail Șandru, law expert and trainer).

The second part of the volume - *Forms and hypostases of the technology-assisted learning* - brings into the reader's attention *The education process in the perspective of digitalization*, a topic that Univ. Prof. Ph.D. Ion-Ovidiu Pânișoară debates from multiple perspectives, and where we find valuable ideas about the school of tomorrow, which needs to keep up with the changes in the social life, about today student's profile, curious, open to change, about *digital citizenship*, cyberbullying, about the realities in today school and the students' and the teachers' lack of motivation, about the high-quality teaching paths and practices, and about the way the digital resources support this process, concluding that "*school must permanently remain a place of experimentation, regulation and reconsideration of the technology and pedagogy behind the teaching approach*", to offer stability and balance.

About the *Improvement of the education process and school performance by using the digital tools and resources*, Assoc. Prof. Ph.D. Olimpius Istrate realizes an analysis based on specialized studies, illustrating the importance of e-learning in the increase of the

graduates' chances of joining the labor market, and a series of results of ICT introduction in the teaching process. Other topics approached in this part: *Explanatory models of learning using ICT* (Univ. Lect. Ph.D. Ruxandra Chirca); *Modification of the individual learning profile in the digital technologies era* (Univ. Lect. Ph.D. Cornelia Măirean); *Self-regulated learning in the virtual environment* (Univ. Lect. Ph.D. Versavia Curelaru); *Investigation-based learning, by using a computer* (Univ. Lect. Ph.D. Roxana Apostolache); *M-learning and u-learning* (Univ. Lect. Ph.D. Dana Crăciun).

In the third part of the volume - *Technology in the delineation of pedagogical innovation* -, Assoc. Prof. Ph.D. Cătălin Glava debates a topic related to *Online learning platforms*, Ph.D. Simona Velea - excellence scientific researcher at the Education Sciences Institute approaches the topic of *European school partnerships by eTwinning*: what is the eTwinning community, about the students' motivation for education and the improvement of school results, about learning in groups or transnational classes using digital technology, etc.; Univ. Prof. Ph.D. Carmen Holotescu and Assoc. Prof. Ph.D. Gabriela Grosseck speaks about *Open education. Open educational resources and mass open online courses*, and Univ. Prof. Ph.D. Emil Stan proposes a topic about *Game and gratuitousness*.

Part 4 - called *Specificity of the teaching process in the technological era* - reunites under this title topic: *Digital education: for a functional and innovative didactics* (Univ. Prof. Ph.D. Ioan Neacșu); *Pedagogical mediation in the digital era* (Univ. Prof. Ph.D. Dorina Sălăvăstru); *Generating e-learning school contents/learning supports* (Univ. Prof. Ph.D. Constantin Cucoș); *Digital textbooks and students' skill formation* (Ph.D. Iuliana Lazăr and Assoc. Prof. Ph.D. Georgeta Pânișoară); *Evaluating school and academic performances in digital educational environments* (Univ. Prof. Ph.D. Nicoleta Laura Popa) and *Training teachers for nowadays' education* (Assoc. Prof. Ph.D. Marian D. Ilie).

"*Educational informatization* - affirms Prof. Constantin Cucoș (p. 257) - *represents an axis of educational modernization and renewal*". In strong relation to this technological environment, the school must realize a series of actions: assume it, exploit it didactically, transforming it into a support and way of learning further, "charge" it with education-generating stimuli, teach the young how to "live" in this new environment, to "*become critical and autonomous with this huge flow in which everything is mixed: value and non-value, necessary and accessory, beneficial and maleficent, comfort and danger, etc.*". At the same time, school is called to "*humanize this environment, fill it with perennial and useful values not just for those present, but also for those coming after us*" (p. 258).

The last part of the volume approaches topics related to *Using technology for educational support services*. In this respect, Ph.D. candidate Mihai Iacob presents the theme *Digital technology in career counseling*, Univ. Prof. Ph.D. Alois Gherguț proposes the topic: *The new digital technologies - approaches in special education and school inclusion for children with special educational needs*. In this last part, we can find subjects such: *Advantages and limits in using modern technologies for teaching basic disciplines to pupils with intellectual deficiencies* (Univ. Prof. Ph.D. Florin Emil Verza and Assoc. Prof. Ph.D. Marilena Bratu); *Technology in psychomotricity* (Univ. Prof. Ph.D. Beatrice Aurelia Abalașei and Univ. Lect. Ph.D. Raluca Mihaela Onose) and *Digital skills development in the elderly* (Univ. Lect. Ph.D. Georgeta Diac).

The new technologies have changed the world, the way we communicate, interact, collaborate, work, get informed, and learn, and school needs to adapt itself, integrate and use the e-learning means as a fundamental tool, contributing to the formation of efficient work habits necessary to the students in the future. The work *Digital Education* presents, from

multiple perspectives, advantages and limits, challenges and opportunities that emerged with the need to translocate education in the online environment, contributing to the development of a new paradigm that will generate important and irreversible changes in the educational process. The theories and concepts presented in those studies can constitute a departure point in teachers' educational practice. The scientific, clear, comprehensible language, the documentation sources, the valuable reflections and pedagogical ideas can constitute basic support in the activity of any teacher preoccupied with his/her training and realization of a high-quality educational process.

With expertise and open vision, the authors of the papers in this volume are road-openers and mind-openers and, at the same time, strong pillars of the edifice of the Romanian education, contributing to understanding the way school needs to adapt itself, to include the new and to find again the best way it can answer a digitalized world's future citizens' training needs.

In conclusion, what characterizes the volume *Digital Education* is, doubtlessly, its pedagogical value, as it manages to bring under the same roof great names of the Educational Sciences area, specialists reunited in an innovative and necessary approach, of maximum interest, in strong relation to the present needs of the Romanian school.

## PRO EDU. INTERNATIONAL JOURNAL OF EDUCATIONAL SCIENCES

### AIMS

*Pro Edu. International Journal of Educational Sciences (PEIJES)* allows access to all readers and promotes scientific research on educational sciences. This journal was founded to publish high quality and original research, theoretical articles and communication in educational sciences.

Pro Edu. International Journal of Educational Sciences, is a journal published and promoted at international level by Ideas Forum International Academic and Scientific Asociation (IFIASA) in collaborations with members of the Department of Teacher Training - DPPD and Faculty of Orthodox Theology and Education Sciences, of "Valahia" University, Târgoviște, Romania.

### SUBJECT AREAS

*Pro Edu. International Journal of Educational Sciences*:
- EDUCATIONAL POLICIES
- MANAGEMENT OF SCHOOLS
- HIGHER EDUCATION
- INITIAL AND CONTINUOUS TEACHER TRAINING
- TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING
- COUNSELLING IN EDUCATION AND CAREER DEVELOPMENT
- TECHNOLOGY ENHANCED LEARNING
- EDUCATIONAL PSYCHOLOGY
- TECHNOLOGICAL & ENTREPRENEURIAL EDUCATION
- EDUCATION BY SPORT
- HEALTH EDUCATION AND QUALITY OF LIFE PROMOTION
- STUDENTS CONFERENCE

### ABSTRACT AND INDEX

Pro Edu. International Journal of Educational Sciences is abstracted and indexed in:
**CROSSREF, WORLDCAT GOOGLE SCHOLAR, DIMENSIONS, SCILIT, SCIENTIFIC INDEXING SERVICES**

### EDITORIAL POLICY

Articles submitted for publication to the Pro Edu.International Journal of Educational Sciences shall not be previously published work or be under simultaneous consideration for publication elsewhere. Please note that by submitting an article for publication the authors confirm that they agree to the requirements below.

Articles submitted to the Pro Edu.International Journal of Educational Sciences which do not meet the Icoana Credintei editorial requirements or which do not cover areas of interest for Pro Edu.International Journal of Educational Sciences readership shall not be considered for publication. This is not necessarily related to the quality of the material, but the result of its failure to comply with Icoana Credintei editorial requirements.

## FORMATTING GUIDELINES

Only contributions formatted in compliance with the rules below will be published:
Authors must include their profession, scientific title, affiliation, postal address and email.
Manuscripts submitted to section Studies and Articles must be written in English.
Manuscripts submitted to section Studies and Articles must be accompanied by abstracts.
Texts in Greek or Hebrew must use original script, including all necessary graphical signs (stress, breathings, etc.). Authors must insert characters from the Insert/Symbol menu.
Book reviews must not exceed 1,500 words, and short notes 500 words.

## COPYRIGHT INFORMATION

## PLAGIARISM POLICY

The editorial board is very strict regarding plagiarism. The journal believes that taking the ideas and work of others without giving them credit is unfair and dishonest. The editorial board retains the absolute authority to reject the review process of a submitted manuscript if it is suspect at plagiarism or subject to plagiarism.

## HOW TO SUBMIT THE PAPER

Articles submitted for publication to the Pro Edu.International Journal of Educational Sciences shall not be previously published work or be under simultaneous consideration for publication elsewhere. Please note that by submitting an article for publication the authors confirm that they agree to the requirements below.

**The author should submit the paper via e-mail to the executive editor at:**
**ifiasa@yahoo.com**
**http://peijes.com/en/AUTHOR-GUIDELINES/**