

15th International Technology, Education and Development Conference

8-9 March, 2021

CONFERENCE PROCEEDINGS



Sharing the Passion for Learning



15th International Technology, Education and Development Conference

8-9 March, 2021

CONFERENCE PROCEEDINGS

Sharing the Passion for Learning

Published by IATED Academy iated.org

INTED2021 Proceedings 15th International Technology, Education and Development Conference March 8th-9th, 2021

Edited by L. Gómez Chova, A. López Martínez, I. Candel Torres IATED Academy

ISBN: 978-84-09-27666-0 ISSN: 2340-1079 DL: V-370-2021

Book cover designed by J.L. Bernat

All rights reserved. Copyright © 2021, IATED

The papers published in these proceedings reflect the views only of the authors. The publisher cannot be held responsible for the validity or use of the information therein contained.

INTED2021 COMMITTEE AND ADVISORY BOARD

| Adam Smith | ΙΔΡΔΝ | Külli Kori | ESTONIA |
|----------------------------------|----------------------|-------------------------------------|----------------|
| Agustín López | | Lorena López | SPAIN |
| Alessia Bevilacqua | | Loreta Juškaite | LATVIA |
| Allison Spring | | Luis Gómez Chova | SPAIN |
| Amparo Girós | | Luís Torres Moreira | PORTUGAL |
| Ana Dias Daniel | | Lukasz Wiechetek | POLAND |
| Ana Paula Lopes | | Lukus2 Wiechelek Mª Jesús Suesta | SPAIN |
| Ana Tomás | | Marcelo Gaspar | PORTUGAL |
| Anna Dillon | UNITED ARAB EMIRATES | • | HUNGARY |
| Antonio Coelho | | Maria Porcel | SPAIN |
| Antonio Coeino Antonio García | | Marian Zajko | SLOVAKIA |
| Asako Ohno | | Mary Dempsey | IRELAND |
| Charles Weiss | UNITED STATES | | ITALY |
| | | | IRELAND |
| Chelo González David Martí | | Michael Collins | IKELAIND |
| Davia Marti Denise Prescott | UNITED KINGDOM | Michela Tramonti Michel Deiné | SPAIN |
| Denise Prescott Dina Nader | UNITED ARAB EMIRATES | 5 | MALAYSIA |
| | | | |
| Eladio Duque | | Norma Barrachina | SPAIN |
| Elena Baguzina | RUSSIAN FEDERATION | | AUSTRIA |
| Elena Grunt | RUSSIAN FEDERATION | , | CZECH REPUBLIC |
| Elena Ors | | Petra Vondráková | CZECH REPUBLIC |
| Emanuel Tundrea | | Remigijus Bubnys | LITHUANIA |
| Eva Ponick | | Rob Branch | UNITED STATES |
| Farhad Eftekhari | FINLAND | Saime Matsu | UNITED STATES |
| Filomena Soares | PORTUGAL | | UNITED STATES |
| Guilherme Penello Temporão | | Sarah Lukas | GERMANY |
| Ignacio Ballester | | Sergio Pérez | SPAIN |
| Ignacio Candel | SPAIN | , , | UNITED KINGDOM |
| Iván Martínez | SPAIN | | ITALY |
| Javier Domenech | | Tânia Carraquico | PORTUGAL |
| Javier Martí | | Tessai Hayama | JAPAN |
| Jeffrey Byford | UNITED STATES | | CANADA |
| Joanna Lees | FRANCE | , | CANADA |
| Jose F. Cabeza | SPAIN | Victor Fester | NEW ZEALAND |
| Jose Luis Bernat | SPAIN | Wan Sin Lim | UNITED STATES |
| Juanan Herrero | SPAIN | Wendy Gorton | UNITED STATES |
| Judith Szerdahelyi | UNITED STATES | - | FRANCE |
| Karl Jordell | | Xema Pedrós | SPAIN |
| Kimberly Hoggatt Krumwiede | UNITED STATES | Yulia Piller | UNITED STATES |
| | | | |

CONFERENCE TRACKS & SESSIONS

INNOVATIVE EDUCATIONAL TECHNOLOGIES

Technology Enhanced Learning Virtual & Augmented Reality Research on Educational Technologies Coding & Educational Robots

DIGITAL & DISTANCE LEARNING

Distance Education in COVID-19 Times MOOCs & Open Educational Resources Blended & Mobile Learning e-Learning Learning Management Systems & Virtual Learning Environments

DIGITAL TRANSFORMATION OF EDUCATION

Data Science & AI in Education Learning Analytics & Educational Data Mining Digital Technologies and Resources for Learning under Lockdown 21st Century Skills Educational Programming & Robotics

INNOVATIVE EDUCATIONAL TECHNOLOGIES

Virtual & Augmented Reality Technology Enhanced Learning Videos and Social Media in Education

INCLUSION & MULTICULTURALITY

Special Educational Needs Intercultural Competences & Multicultural Environments Diversity Issues Digital Divide during Pandemic and Beyond

ACTIVE & STUDENT-CENTERED LEARNING

Gamification & Game-based Learning Problem & Project-Based Learning Pedagogical Innovations Soft Skills Development Libraries and Museums as Learning Spaces

ASSESSMENT, MENTORING & STUDENT SUPPORT

Assessment & Evaluation Rethinking Assessment in COVID-19 Times Mentoring & Tutoring Student Engagement & Wellbeing in COVID-19 Times Student Support & Motivation

EDUCATIONAL STAGES & LIFE-LONG LEARNING

From Pre-school to Secondary Education Vocational Training Exchange Programmes & International Experiences Transition to the Job Market Developing Entrepreneurship in Education Life-Long & Workplace Learning

QUALITY & IMPACTS OF EDUCATION

Quality in Education Curriculum Design Experiences Sustainability & Environmental Awareness Social Impact of Education University-Industry Collaboration Educational Policies & Impact of Education

TEACHER TRAINING & ED. MANAGEMENT

ICT & Digital Skills Teacher Training and Support in COVID-19 Times Professional Development of Teachers Educational Management

STEM EDUCATION

Maths & Statistics Engineering Education STEM Experiences

LANGUAGE LEARNING AND TEACHING

Foreign Languages Teaching Foreign Languages during the Lockdown Technology for Language Learning Language Learning

DISCIPLINE-ORIENTED SESSIONS

Architecture & Civil Engineering Education Health Sciences Education Computer Science Business and Management Education

ABOUT INTED2021 Proceedings

HTML Interface: Navigating with the Web browser

This USB Flash drive includes all presented papers at INTED2021 conference. It has been formatted similarly to the conference Web site in order to keep a familiar environment and to provide access to the papers trough your default Web browser (open the file named "INTED2021_Proceedings.html").

An Author Index, a Session Index, and the Technical Program are included in HTML format to aid you in finding conference papers. Using these HTML files as a starting point, you can access other useful information related to the conference.

The links in the Session List jump to the corresponding location in the Technical Program. The links in the Technical Program and the Author Index open the selected paper in a new window. These links are located on the titles of the papers and the Technical Program or Author Index window remains open.

Full Text Search: Searching INTED2021 index file of cataloged PDFs

If you have Adobe Acrobat Reader version 6 or later (www.adobe.com), you can perform a full-text search for terms found in INTED2021 proceedings papers.

Important: To search the PDF index, you must open Acrobat as a stand-alone application, not within your web browser, i.e. you should open directly the file "INTED2021_FrontMatter.pdf" with your Adobe Acrobat or Acrobat Reader application.

This PDF file is attached to an Adobe PDF index that allows text search in all PDF papers by using the Acrobat search tool (not the same as the find tool). The full-text index is an alphabetized list of all the words used in the collection of conference papers. Searching an index is much faster than searching all the text in the documents.

To search the INTED2021 Proceedings index:

- 1. Open the Search PDF pane through the menu "Edit > Advanced Search" or click in the PDF bookmark titled "SEARCH PAPERS CONTENT".
- 2. The "INTED2021_index.pdx" should be the currently selected index in the Search window (if the index is not listed, click Add, locate the index file .pdx, and then click Open).
- 3. Type the search text, click Search button, and then proceed with your query.

For Acrobat 9 and later:

- 1. In the "Edit" menu, choose "Search". You may receive a message from Acrobat asking if it is safe to load the Catalog Index. Click "Load".
- 2. A new window will appear with search options. Enter your search terms and proceed with your search as usual.

For Acrobat 8:

- 1. Open the Search window, type the words you want to find, and then click Use Advanced Search Options (near the bottom of the window).
- 2. For Look In, choose Select Index.
- 3. In the Index Selection dialog box, select an index, if the one you want to search is available, or click Add and then locate and select the index to be searched, and click Open. Repeat as needed until all the indexes you want to search are selected.
- 4. Click OK to close the Index Selection dialog box, and then choose Currently Selected Indexes on the Look In pop-up menu.
- 5. Proceed with your search as usual, selecting other options you want to apply, and click Search.

For Acrobat 7 and earlier:

- 1. In the "Edit" menu, choose "Full Text Search".
- 2. A new window will appear with search options. Enter your search terms and proceed with your search as usual.

ENHANCING MEDIA COPYRIGHT LITERACY THROUGH THE SOCIAL MEDIA: CASE STUDY AT ULSIT

E. Zdravkova¹, S. Dimitrova¹, Metodi Traykov²

¹University of Library Studies and Information Technologies (BULGARIA) ²New Bulgarian University (BULGARIA)

Abstract

Introduction: In the times we live in, cyberspace is considered by many as a free space and so that any electronic content can be used for free. At the same time, the fight against piracy is condemned as a fight against the free exchange of information. And only half of Bulgarians use Internet technologies safely. The fact is that there is a need for a new legal framework that regulates in detail the regulators in the media, as well as the rights of authors who create journalistic materials in the media space in Bulgaria. But the competence of creators in terms of copyright in the media and intellectual property in general is also essential. The legal rights of authors of creative products in the media are intellectual property rights. Intellectual property is directly linked to the information contained in its objects, and in this sense the information sources on the Internet can be referred to as objects of intellectual property, in particular copyright. Intellectual property is the ownership of the information that intellectual products contain, and their creators have full ownership of them. In other words, intellectual property rights must be seen as objective and subjective law, discipline and science, widely represented in the internet of the new millennium.

The paper aims: to present the conception and core activities of the project of University of Library Studies and Information Technologies (ULSIT) "Model for research and increase copyright literacy at the media in the university environment" (2019-2021), financed by National Science Fund of the Bulgarian Ministry of Education and Science, Contract № KP-06-M35/1 from 18.12.2019 led by Assist. Prof. Evelina Zdravkova-Velichkova, PhD.

Presentation: The aim of the project is research and practical activities related to the formation of copyright competence of students specializing in the professional field 3.5 "Social Communications and Information Sciences" at ULSIT. This paper presents the development of the project's presence on the Internet and the social networks for the first half of 2020. It is presented on the Internet through a logo, website and presence on social networks with design and content, subordinated to the message of the World Intellectual Property Organization for 2020 and the green future and the mission of ULSIT to educate, teach and inspire for the better life. This paper presents the vision and the presence of the project on the Internet – through its website, Facebook page, Twitter account and firstly – logo, which is an essential part today and especially for recognition.

The methodology for achieving the main objective of the study and solving the set research tasks include the following specific methods: web design, social media analysis, comparative analysis.

Conclusion: The presence of the project in the two most famous and recognizable social networks around the world will help in the project's further realization and dissemination of the results to the general public, and so is the presence in the WWW as an independent website. After all, it has to be concluded that the issue of enhancing media copyright literacy through the social media in the context of the broader framework of IL is relevant, timely and necessary. The problem under consideration is extremely relevant, partly concerned with various aspects by other authors, but has not been fully disclosed so far.

Keywords: education, university information environment, website, logo, design, facebook, twitter, media copyright literacy, project.

1 INTRODUCTION

Given the place of Internet and especially social media and social networks in the life of every modern human being, the need for media and intellectual property literacy of the consumers is becoming increasingly apparent. Critical thinking is a necessary step in this direction. Every user will be incredibly faced with content that they are not sure whether to believe. To avoid the dissemination of unreliable information, especially in uncertain times, it is necessary for the user to question what he sees. With over 2,7 billion monthly active users as of the second quarter of 2020, Facebook is the biggest social network worldwide. In the third quarter of 2012, the number of active Facebook users surpassed one billion, making it the first social network ever to do so. To see how powerful social media really is, let us say that if all Indian Facebook users were a country, it would be the fourth most populous in the whole world. The power of social media should not be belittled.

The world has begun a battle with COVID-19. Hence people began to use social networks to learn about the scale and course of the epidemic. The latest pandemic crisis has shown that university education in the classical, academic way is becoming increasingly complex and difficult to access [1]. And the need for social networks and social media escalated. Media and intellectual property literacy became an essential part of every students' realization. Since intellectual property reaches into everyone's daily lives, it should not be taught as a discipline - theoretically sterile and detached from daily routine or business. On the contrary, the students must realize from the very beginning the value of different IP rights as an essential business asset in today's knowledge – based economy [2].

The project "Model for research and increase copyright literacy at the media in the university environment" has been implemented since December 18, 2019 as part of the research work of the university. The team consists of: Chief Assistant Professor Kamelia Planska-Simeonova, PhD; Chief Assistant Professor Elisaveta Tsvetkova, PhD; Chief Assistant Professor Metodi Traykov, PhD; PhD students Svetoslava Dimitrova, Ruska Manolova, Evgenia Vasileva and Steliana Yordanova, headed by Assistant Professor Evelina Zdravkova-Velichkova, PhD.

The goal of the project is research and practical activities, related to the formation of copyright competence of students in specialties in the professional field 3.5 "Public Communications and Information Sciences" at ULSIT. The project studies, analyses and summarizes the complex nature of the concept of "copyright literacy" and prepares an applied concept for its further improvement. The impact of technology on the transformation of the media in the intellectual aspect is considered. The state of the media – both traditional and new – newspapers, radio, television, information websites, online platforms, electronic publications, as objects of intellectual property, in particular copyright and related rights, as well as their features, is studied.

2 METHODOLOGY

The scientific interest in the problems and current trends in the media industry in terms of intellectual property policy is provoked by the need to fill some gaps in media industry research, in particular copyright and related rights. The problem under consideration is extremely relevant, partly concerned with various aspects by some authors, but has not been fully disclosed so far.

The methodology for achieving the main objective of the study and solving the set research tasks include the following specific methods: web design, social media analysis, comparative analysis. The method of research and content analysis is applied in the identification, systematization, summarization and analysis of the selected information.

3 RESULTS

Nowadays, the face, the business card of any activity, company, institution is the website and the logo – the "office", which works 24 hours a day, 7 days a week, is accessible from all over the world regardless of time, time difference, working hours. Therefore, among the first tasks of the project team was the creation of a logo and website, i.e., marketing strategy.

Every April 26, we celebrate the World Intellectual Property Day to learn about the role that intellectual property (IP) rights play in encouraging innovation and creativity. In 2000, World Intellectual Property Organization's (WIPO) member states designated April 26 – the day on which the WIPO Convention came into force in 1970 – as World IP Day with the aim of increasing general understanding of IP. Every year WIPO celebrates the IP day dedicated to a specific feather, related to IP. In 2020 WIPO focuses on the green future of tomorrow, built through the use of clean resources, natural foods, sustainable economies and green energy. Hence the day was marked with the slogan "Innovate for a green future".

The colors green and blue were chosen as the corporate color of the project. Those colors respect and inspire modernity and trust, which is the philosophy of the project. And the WIPO has chosen these colors as leaders in the design of events for the year 2020. But it also corresponds with the slogan choosen for 2021 – "SMEs & IP: Taking your ideas to market"

The logo shows who are we and what we want to say to people, it is an essential part of our visual advertising. That is why we relied on several important criteria in its creation – to express the goals, components, themes of the project, to inspire confidence, to make the research memorable, to express professionalism. And to be up to date with global trends in the field of law and intellectual property.



Figure 1. Logo of the project

The model is determined by the copyright symbol - ©. Rositsa Kirilova Dimitrova was the one responsible for the quality production of the logo as part of the project identity, which will distinguish the project from the other ones of ULSIT. Leading in the production of the logo is the minimalist approach. The identity of the project is visualization through a simple and clear image. Thus, it is perceived and remembered easily, without being burdened with unnecessary details. The palette includes three colours that symbolize the environment – sky, vegetation and sun (corresponding with the logo of the World IP day in 2020). Leading is the green. It participates within the element itself and at the same time builds its overall framework. The font is dominated by blue. The goal is to achieve brightness and variety, but to maintain the overall harmony of the image. Yellow occupies a very small area, but it stands out due to its central position.

3.1 The website – www.mediaipl.unibit.bg

The project site was built using CMS WordPress. WordPress is built around two basic concepts: publications and pages. Publications are typical blog entries. These are a series of articles, usually listed in chronological order. Pages are used for more static content (i.e., content that does not change or changes infrequently). A typical "About Us" page is an example of a page on a typical site. In most cases, the content on the "About Us" page does not change as often.

Also, using the CMS system, internet optimization of the site was done, namely Search Engine Optimization (SEO). The Search Engine Optimization are techniques that help our site get a higher position in the main search results, thus making our site more visible to people who search for products or services through search engines. Search by keyword copyright literacy through Google leads to the site www.mediaipl.unibit.bg (Figure 2).

The original vision and functionality of www.mediaipl.unibit.bg is the work of the IT-creative specialist in the project's team – Chief Assistant Professor Metodi Traykov, PhD. He summarized the overall concept for presenting the project online, reviewed and discussed by the project team. An email mediaipl@mediaipl.unibit.bg was created to have a connection with the project's partners, as well as to conduct the survey, part of the project work plan. Thus, created e-mail with the name of the site, inspires more trust in all who write to the project's team, and shows a professional attitude to work.



Figure 2. The website of the project

3.2 Facebook – www.facebook.com/MediaIPL

According to data from Statista.com there were approximately 4,3 million Facebook users in Bulgaria as of December 2020, with 24 percent of those users being between 25 and 34 years of age and the source also notes that 48 percent of these users were male, and 52 percent were female.

The profile picture of the facebook page of MedialPL is the logo of the project and the cover photo includes the logo of the project, but also the logo of the ULSIT and the one of the National Science Fund. The page is created on March 30, 2020.

The Facebook page of MediaIPL has a total of 317 likes and 325 followers (up to 07.01.2021). 217 from those users are female and 100 are male – 68% are female and 32% are male. Most of the female users are aged between 45 and 54 and most of the male users are also in the same age gap – between 45 and 54. There is only one follower aged between 13 and 17 and female, but no male in this age gap. Out target group are students, but they could fall in most of the age groups. However, in the age group between 18 and 24 there are 28 followers (24 females and 4 male). The most popular age group of Facebook users in Bulgaria is between 25 and 34 years – in this category the page followers include 44 (31 females and 13 male). The second age gap with most followers on the page is between 35 and 44 (46 females and 15 male) with total of 61 followers.

Thanks to the page insights we can determine where do the followers live and they are from across the globe, incl.: Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Estonia, Finland, France, Germany, Greece, India, Italy, Kuwait, Macedonia, Netherlands, Nigeria, Norway, Poland, Romania, Russia, Saudi Arabia, Serbia, South Africa, Spain, Sweden, Switzerland, Tanzania, Turkey, United Kingdom, USA.

The reach of the page's publications is organic. Organic reach is the number of people who had an unpaid post from a page enter their screen.

The average post gets from 203 reached people up to 1119. Considering the fact that almost every post gets more reached people than the page likes, it can be concluded that the organic reach is successful.

The most popular post on the facebook page reached 1119 people and managed to achieve 411 engagements (total of comments, shares, likes, incl. on the page itself, but also on the shared publications on the users' walls. It is from 2 May 2020 and is dedicated to the birthday of the project leader – Evelina Zdravkova – with 31 likes, 12 comments and 2 shares (Figure 3).

| Media IPL 2 May 2020 · 🔇 | | *** |
|---|---|--|
| ръководителя на наши Животът е прекрасен, н честни и винаги готови да ти се случва, винаги | а възможност да честитим рожд я проект - ас. инж. д-р Евелина З когато познаваме хора като теб, 1 да помогнат. Желаем ти всичко да бъдеш същата уверена и упо га глава и все така да продължав | Здравкова-Величкова! непринудени, усмихнати, о най-красиво и желано орита жена, да вървиш |
| 1,119 People reached | 411 Engagements | Boost Post |
| (1) 31 | | 12 comments 2 shares |

Figure 3. The most popular post on the facebook page

Most of the publications in Facebook are aimed at raising awareness of IP issues. One of the other most engaging publications is dedicated to essence of copyright holders – musicians, artists, writers, directors and how they could use their own creative works and to receive remuneration when their works are used (Figure 4). The post reached 543 people and reached 32 engagements.



Figure 4. The second most popular post on the facebook page

The publications also include news from IP authorities – World Intellectual Property Organization, European Union Intellectual Property Organization, European Patent Organization. Posts related to media literacy are also targeted at regularly basis. Information about webinars, conferences, lectures, courses, is published.

3.3 Twitter – Twitter.com/MedialPL

The second choice for presence in the online space offered by social networks is Twitter – the network also known as a place for a micro-blog. The choice was again guided by data offered by statista.com, which shows that currently active user accounts on Twitter exceed 152 million. Thus, the project account https://twitter.com/MediaIPL also took its rightful place in the famous social network, also in early 2020. The image of Media IPL on Twitter is identical to that on Facebook – again we used the logo for a leading photo of the account, and for the cover the logo of the project, as well as that of the University of Library Studies and Information Technologies and that of the National Science Fund at the Ministry of Education and Science.

In 2020, Twitter's user base in Bulgaria amounts to approximately 0,2 million users. The Twitter account of @MediaIPL was created in the beginning of April 2020 and it has only 22 followers. The account has 187 tweets.

The period with the most impressions (number of times users saw the Tweet on Twitter) is April-June 2020 – with 8,900 impressions, 92 likes and 18 replies for the whole period and 105 impressions per day. The period with the lowest number of impressions is in the summer - August 2020 is with 463 impressions. The tweet with the most impressions is with 803 impressions, but 0,2% engagement rate (the number of engagements (clicks, retweets, replies, follows and likes) divided by the total number of impressions).

| Световен ден за културно развитие - По инициатива на ООН на 21 май се отбелязва Денят на културното разнообразие. През 2001 г. на свое заседание във Франция, ЮНЕСКО приема една обща декларация, чият цел е популяризирането на разнообразието на националните култури света. | 000 |
|--|-----|
| | то |

Figure 5. The most popular tweet on the Twitter account

4 CONCLUSIONS

The modern world is too rich in channels for expressing and sharing an opinion or position. We live in a time when everyone creates media content. That is why the need for quality content is even greater. Users share a huge amount of e-content. Rules for handling this information are crucial because they have serious consequences for consumer rights and the well-being of the society. And how to protect them from terrorism, hate speech, violence, copyright infringement, etc.

The media must establish a copyright policy regarding compliance with copyright and related rights. The mission of the higher school is for the audiences to know the current copyright norms, including the exceptions and limitations of copyright for libraries, educational institutions, museums and archival institutions, which requires high copyright competence of managers and specialists.

ACKNOWLEDGEMENTS

This research would not have been possible without the financial assistance of the following project: "Model for research and increase copyright literacy at the media in the university environment", financed by National Science Fund of the Ministry of Education and Science of the Republic of Bulgaria with Contract № KP-06-M35/1 from 18.12.2019, led by Assist. Prof. Evelina Lyubomirova Zdravkova-Velichkova, PhD.

REFERENCES

- [1] S. Denchev, T. Trencheva, I. Trenchev, Application of the Game Engine in the Promotion and Training of the Cultural Heritage // In Conference Proceedings: 14th International Technology, Education and Development Conference, 2-4 March 2020, Valencia, Spain, INTED 2020, pp. 2700-2706.
- [2] Trencheva, T., Lazarova, M., Denchev, S., Basili, C. Innovative Strategy of Intellectual Property Education in the Digital Age // 13th annual International Conference of Education, Research and Innovation ICERI20 Proceedings, 9th-10th November, 2020, online conference, Vol. 13, pp. 2799-2804.
- [3] Number of monthly active facebook users worldwide // https://www.statista.com/statistics/264810/ number-of-monthly-active-facebook-users-worldwide/ (Accessed 07.01.2021)
- [4] Facebook users in Bulgaria // https://www.statista.com/statistics/805460/facebook-users-bulgaria/ (Accessed 07.01.2021)

- [5] Twitter users in Bulgaria // https://www.statista.com/forecasts/1146175/twitter-users-in-bulgaria (Accessed 07.01.2021)
- [6] T. Trencheva, Information Literacy in the Framework of Higher Education: Focus on Intellectual Property Training // In Conference Proceedings: 14th International Technology, Education and Development Conference, 2-4 March 2020, Valencia, Spain, INTED 2020, pp. 6555-6561. ISBN: 978-84-09-17939-8, ISSN: 2340-1079
- [7] T. Trencheva. Integrating of Intellectual Property Training in Library and Information Science: ULSIT's Formal Educational Model // In Conference Proceedings: 12th International Conference on Education, Research and Innovation, 11th – 13th November 2019, Seville, Spain, ICERI 2019, pp. pp. 7462-7466.
- [8] D. Stoyanova, E. Savova, I. Peteva, R. Yotova, "Academic Research Projects for Students Support and Motivation in University Information Environment", in Proceedings of ICERI2018 Conference 12-14th November 2018, Sevilla/Spain, 2018, pp. 9706-9709.
- [9] I. Trenchev, R. Mavrevski, M. Traykov, D. Stoykov. (2019) Mathematical approaches for creation of complex 3d models and their application in education. In: Conference Proceedings ICERI 2019, pp 4909-4914.
- [10] Rasheva-Yordanova, K., S. Toleva-Stoimenova, B. Nikolova, I. Kostadinova. Informing and Digital Literacy in Conditions of Digital Divide. In: Conference Proceedings of 10th Annual International Conference of Education, Research and Innovation (ICERI), Seville, Spain, 2017, pp. 6827-6832.