14TH INTERNATIONAL CONFERENCE ON EDUCATION AND NEW LEARNING TECHNOLOGIES

PALMA (SPAIN) 4TH-6TH OF JULY, 2022



# CONFERENCE PROCEEDINGS



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#### **EDULEARN22 Proceedings**

14th International Conference on Education and New Learning Technologies July 4th-6th, 2022 Palma, Mallorca, SPAIN

#### Edited by

Luis Gómez Chova, *University of Valencia, Spain* Agustín López Martínez, *University of Barcelona, Spain* Joanna Lees, *CEU Cardinal Herrera University, Spain* 

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#### **Preface**

EDULEARN22 Conference Proceedings contain selected and revised papers from the 14th annual International Conference on Education and New Learning Technologies.

EDULEARN22 was held in Palma (Spain) last 4-6 July 2022. Every year, EDULEARN brings together lecturers and researchers from universities and educational institutions from all over the world. This edition welcomed participants from 79 different countries, ensuring a geographic diversity and a multicultural environment.

The main objective of EDULEARN22 was to offer a meeting point for educational experts to share and discuss their experiences and projects on education, pedagogical technologies, and educational innovations. The conference program offered different keynote speeches, plenary sessions, parallel thematic sessions and workshops delivered by education experts. The keynote speeches are available at IATED Talks (iated.org/talks/)

In addition to the Technical Program, different networking activities and events were scheduled where participants could interact with other delegates and shared their perspectives on education.

The scope of EDULEARN22 included the following topics: Digital Tools In Education, Digital literacy, Open Educational Resources, Virtual and Augmented Reality, Flipped learning, elearning experiences, Blended and Hybrid learning, m-learning, digital transformation in education, Game-based learning, MOOCs, Coding and Computational Thinking, Digital Technologies for learning under lockdown, Personalized and Adaptive learning, Peer and Teambased learning, Student Engagement, University-Industry cooperation, International Projects, Exchange and Mobility Programs, Entrepreneurship Education, Student support and Wellbeing, STEM education, Diversity and Equity in education, Special and Inclusive experiences, Tutoring and Mentoring, Curriculum design, Quality assurance, Active and Experiential learning, Professional Development of Teachers, Pre-Service Teacher experiences, Vocational Education, Digital Competence of Teachers.

The EDULEARN22 Proceedings include the accepted contributions presented at EDULEARN22 Conference. The EDULEARN22 International Program Committee is composed of lecturers and researchers from all over the world. A meticulous job in selecting papers for publication was conducted. We wish to thank the program committee members who conducted a blind peer review process to guarantee the quality of the contributions and presentations. The following points were evaluated: information content, relevance to the field, general structure, clarity of contents, originality, relation to the conference topics and disciplines. The language of the publication was exclusively English.

Moreover, EDULEARN22 aims to publish conference proceedings that contain high-quality original research articles, meeting the expected ethical standards. Authors publishing in EDULEARN22 Proceedings signed the IATED copyright transfer form. IATED guarantees the high technical and professional quality of the publications, and that good practices and ethical standards are maintained. More information about the publication ethics of IATED is available at: https://iated.org/publication\_ethics

Finally, we wish to extend our most sincere thanks to all members and delegates who have contributed to EDULEARN22 Proceedings. We also wish to express our gratitude to all participants and attendees for their engagement, motivation and passion for education.

Luis Gómez Chova Agustín López Martínez Joanna Lees

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#### **Organizing Committee**

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Omar Blibech - Gulf University, Bahrain

Reed Stevens – Northwestern University, United States

Stephen Heppell – Universidad Camilo José Cela, Spain

Wayne Holmes - University College London, United Kingdom



## Wayne Holmes, University College London (United Kingdom) Workshop: The right type of AI in Education

Current AI in education approaches tend to be solutions- rather than problems-oriented. In this workshop, we're going to take steps to address this, focusing on identifying genuine education problems that the application of AI might help address. Throughout, we will take a critical and human rights perspective, and will ensure a voice for all.



# Michelle R. Weise, National University System (United States) Workshop: Jumping to your next S-curve

In this futures-oriented workshop, Dr. Michelle R. Weise will facilitate small group breakout sessions in which you will each have an opportunity to think through your current business or organizational model as well as your value proposition for the working learners of today and tomorrow.



#### Stephen Heppell, Universidad Camilo Jose Cela (Spain)

Workshop: The aggregation of marginal learning gains: making your learning space so very much better

The workshop explores the many environmental details covered in Stephen's keynote and seeks simple, cost effective, proven, try-today, solutions to optimising your learning space. If we want to be our best learning selves, then how might we start today?



#### Desireé Cranfield, Swansea University (United Kingdom)

Workshop: Knowledge Sharing café – teaching innovation before, during and after Covid-19

The aim of this session is to provide an opportunity for attendees, academics, to come together, in an informal setting to informally share teaching experiences, both good and bad, with the aim to inform practice.

The impact of this session can be the building of networks, the immediate sharing of teaching best practice of a time before, during, and after the pandemic, improving the knowledge around teaching practice during this difficult period.



# Julie Smith, Webster University in St Louis, Missouri (United States) Workshop: Media Literacies: The 21st Century Survival Skills that can Change the World

People around the world are spending – on average – eight hours a day with electronic mass media. Yet even in 2022, we are still not talking enough about how this affects people personally, politically, physically, emotionally and educationally. Using theoretical frameworks to provide context as well as classroom experiences to provide relevance, Smith will explain the importance of media literacy skills, how to teach them and the difference they can make in the lives of citizens and students.



Reed Stevens, Northwestern University (United States)
Workshop: FUSE Studios: A Choice and Interest Centered Learning
Environment

In this one-hour session, the FUSE team, led by creator Reed Stevens, will seek to bring the audience inside the FUSE experience in two ways over the first 25 minutes: (1) We will provide a tour of the design principles and core activities of a FUSE Studio. (2) We will share vivid representations of youth and teacher-facilitator experiences in FUSE, drawn from a half decade of video-based ethnographic fieldwork and extended interviews with students. In the second 25 minutes, we will seek to bring the audience further inside the FUSE experience via trying one or more FUSE challenges.



Maria Luisa Spreafico, Politecnico di Torino (Italy) Paola Morando, Università degli studi di Milano (Italy)

Workshop: Not only math: a game-based learning experience for a new teaching approach

In this workshop we present three didactic games in two versions each: math and art, math and science and math and English. Participants will experience the activities live during the workshop. Since we only use everyday materials, like paper and recycled items, teachers can easily replicate the games in their own classes.



Hesham Elmarsafawy, Gulf University (Bahrain) Workshop: Science Fiction Drama for Continuous Development in Higher

Education

The Workshop aims to introduce innovative pedagogy and outline the

mechanism of utilizing science fiction drama in the educational processes as alternative tool for Brain warm-up, support the understanding of science matters, forming futuristic view, foster creativity and enhance students' learning abilities and engagement.

#### **EDULERN22 Keynote Speakers**

#### **Keynote Speakers**

Michelle R. Weise – *National University System, United States* Stephen Heppell – *Universidad Camilo Jose Cela, Spain* Wayne Holmes – *University College London, United Kingdom* 

#### Michelle R. Weise – National University System (United States)



Keynote speech: Long Life Learning: Preparing for Jobs that Don't Even Exist Yet

Tech is advancing; jobs are morphing, and job tenure is shorter; retirement is delayed or gone entirely; and education has to be continuous. Education and workforce strategist Dr. Michelle R. Weise talks about the infrastructure we need to build for a future filled with 20, 30, or more job changes. From wraparound supports for workers to targeted education, integrated earning and learning, and transparent and fairer hiring, Dr. Weise will discuss the research from her latest book and how we prepare talent for jobs that don't even exist yet.

Biography: Dr. Michelle R. Weise (pronounced W-ice) is the Vice Chancellor of Strategy and Innovation at National University System. She is also the author of Long-Life Learning: Preparing for Jobs that Don't Even Exist Yet (Wiley, 2021). Her book was awarded the 2021 Phillip E. Frandson Award for Literature by UPCEA (University Professional and Continuing Education Association), recognizing the author and publisher of an outstanding work of continuing higher education literature. Thinkers 50 named her one of 30 management and leadership thinkers in the world to watch in 2021. Dr. Weise's work over the last decade has concentrated on preparing working-age adults for the jobs of today and tomorrow. She has served as a senior advisor at Imaginable Futures, a venture of The Omidyar Group. She was also the chief innovation officer of Strada Education Network as well as of Southern New Hampshire University. With Clayton Christensen, she coauthored Hire Education: Mastery, Modularization, and the Workforce Revolution (2014) while leading the higher education practice at Christensen's Institute for Disruptive Innovation. Dr. Weise also advises BrightHive, a data collaboration platform, the Virginia Economic Development Partnership, the Institute for Higher Education Policy (IHEP), the SkillUp Coalition, Basta, Hitch, Bayes Impact, Clayton Christensen Institute Social Capital R&D Project, and World Education's Personal and Workplace Success Skills Library. She has also served as a commissioner for Massachusetts Governor Baker's Commission on Digital Innovation and Lifelong Learning, Harvard University's Task Force on Skills and Employability, and the American Academy of Arts and Sciences' Commission on the Future of Undergraduate Education. Her commentaries on redesigning higher education and developing more innovative workforce and talent pipeline strategies have been featured in The Economist, The Wall Street Journal, The New York Times, Harvard Business Review and on PBSNewshour. Michelle is a former Fulbright Scholar and graduate of Harvard and Stanford.

#### Stephen Heppell – Universidad Camilo Jose Cela (Spain)



Keynote speech: The aggregation of marginal learning gains: why they matter so much for the future of Learning

Learners are facing unprecedented choices - not only of nomadic campuses, hybrid systems and remarkable new technologies, but also of the many details, from light brightness to levels of volatile organic compounds in their learning places, and even diet. These combine to have a substantial impact on our learning, but if we neglect them, then today's learners will seek better places for their learning, elsewhere. This keynote also explores where those better places might be.

Biography: Professor Stephen Heppell has been a professor since the 1980s, he has an unrivalled track record of success and a string of huge projects in both Learning and Technology. He is credited with being the person who put the C into ICT. His support for better Learning is sought by everyone from governments and major corporations, through schools and universities, to elite sports – lately England Rugby, and Team GB's elite Olympic coaches. Everyone needs better learning. He currently holds the Felipe Segovia Chair of Learning Innovation at Universidad Camilo Jose Cela in Madrid. Additionally, he is Emeritus Professor and Chair of New Learning Environments at Anglia Ruskin University A pioneer of multimedia and CD-ROM before the Internet, post-internet Professor Heppell created and led what was the Guinness Book of Record's largest internet learning project, years before Google, Facebook et al. He has been, and continues to be, at the heart of many world leading projects since. Professor Heppell's learning design work extends beyond the digital and virtual. Pioneering learning space designs include the UK "Classrooms of Tomorrow" project, much work in the UK Building Schools for the Future initiative, and today school and university building projects ranging from Peru to Spain, from Australia to SE Asia, from Syrian refugees to some of the wealthiest learning institutions in the world. Pivotal research including the learnometer project analysing the light, temperatures, CO2 and more that contribute to better learning and working spaces, have led to Stephen being in considerable demand to transform physical learning spaces in education, but also everywhere from new media to the Australian mining industries.

#### Wayne Holmes - University College London (United Kingdom)



Keynote speech: Artificial Intelligence and Education. A Critical Studies Perspective

Artificial Intelligence (AI) is frequently hailed as a 'solution' to many of education's core problems (e.g., OECD, 2021) – problems such as the lack of qualified teachers, student underachievement, and better preparing learners for workplaces and career paths that may be very different from current paradigms. However, such claims tend to be aspirational rather than evidence-based (Miao & Holmes, 2021), and overly-simplistic, forgetting issues such as agency, pedagogy, surveillance, efficacy, and ethics (Holmes et al., 2021; Holmes et al., in press; Holmes & Porayska-Pomsta, in press; Porayska-Pomsta,

Holmes and Nemorin, in press). Current approaches tend to be solutions- rather than problemsoriented, and all too often replace teacher functions rather than empower teachers, while the teaching of AI almost always focuses on the technological dimension of AI to the exclusion of the human dimension. Accordingly, this presentation will explore teaching with and about AI, from a critical studies and human rights perspective. It will identify and address many of the key myths, and will pose more questions about AI and the futures of learning than it answers.

Biography: Wayne Holmes (PhD, University of Oxford) is a learning sciences and innovation researcher who teaches at University College London and is a researcher on Artificial Intelligence (AI) and education for UNESCO, IRCAI (the International Research Centre for Artificial Intelligence under the auspices of UNESCO), and the Council of Europe. Having been involved in education throughout his life, Wayne brings a critical studies perspective to the connections between AI and education, and their ethical and social implications. His recent publications include "The Ethics of AI in Education: Practices, Challenges and Debates" (in press), "Artificial Intelligence and Education, through the Lens of Human Rights, Democracy and the Rule of Law" (in press), "Artificial Intelligence in Education. Promise and Implications for Teaching and Learning." (2019), "Ethics of AI in Education: Towards a Community-Wide Framework." (2021), and, for UNESCO, "AI and Education: Guidance for Policy-makers." (2021). Wayne also coauthored the EU's DigComp 2.2 Annex "Citizens Interacting with AI Systems" (2022), and has given invited talks on AI and education in Brazil, China, Croatia, Denmark, Germany, Greece, India, Japan, Oman, Slovenia, Spain, and the US (and online to audiences in many other countries around the world).

#### **Conference Tracks & Sessions**

The INTED2022 conference program is available online at https://iated.org/edulearn22

#### ORAL SESSIONS MONDAY

Digital Literacy Next Generation Classroom Student Engagement University-Industry Collaboration **International Cooperation** Language Learning and Teaching STEM Education during COVID-19 Media Literacy, Cybersecurity and Data Privacy Flipped Learning Peer and Team-Based Learning **Entrepreneurship Education** Exchange and Mobility Programmes Language Learning Technologies Architecture & Civil Engineering Education Metaverse and Virtual Reality Environments MOOCs & Open Educational Resources Personalized and Adaptive Learning Life-long & Workplace Learning **Educational Management** Pedagogical Innovations in Engineering Education Digital Tools in Maths Education Virtual & Augmented Reality Blended & Hybrid Learning **Tutoring and Mentoring Education for Sustainability** Student Support and Wellbeing Experiences in Engineering Education Maths in Higher Education

#### POSTER SESSIONS MONDAY

Emerging Technologies in Education New Experiences in Education

#### **ORAL SESSIONS TUESDAY**

Digital Transformation of Education
Data Science & AI in Education
Student Support during COVID-19
From Face-to-Face to Remote Learning (1)
Diversity and Equity in Education
Health Literacy and Patient Education
Mathematics in Primary & Secondary Education
e-Learning Experiences
Work-based Learning
Assessment of Student Learning (1)
Early and Primary Education
Social Inclusion and Academic Success of Chinese Students in EU Higher Education
Experiences in Health Sciences Education
STEM Education Experiences

m-Learning

Active & Experiential Learning

Assessment of Student Learning (2)

From Face-to-Face to Remote Learning (2)

Digital Divide and Educational Inequalities

Special and Inclusive Education

Curriculum Design & Quality Assurance

Digital Technologies for Learning under Lockdown

Game-based Learning

Computer Science and Programing in Higher Education

From Face-to-Face to Remote Learning (3)

Teaching Experiences and Support during COVID-19

**Business Education Experiences** 

Professional Development of Teachers

21st Century Skills

Digital Competences of Teachers

Coding & Computational Thinking

Emergency Remote Teaching during COVID-19

Student Wellbeing in Social Media and Online Learning

Vocational Education

Pre-service Teacher Experiences

#### POSTER SESSIONS TUESDAY

From face-to-face to Remote Learning New Trends in Education and Research

#### VIRTUAL SESSIONS

#### DIGITAL TRANSFORMATION OF EDUCATION

Data Science & AI in Education

Learning Analytics & Educational Data Mining

Digital Transformation

Digital Technologies and Resources for Learning under Lockdown

21st Century Skills

**Educational Programming & Robotics** 

#### **DIGITAL & DISTANCE LEARNING**

Distance Education in COVID-19 Times

Challenges and Practices during the Pandemic and Beyond

Blended & Mobile Learning

MOOCs & Open Educational Resources

Learning Management Systems & Virtual Learning Environments

#### INNOVATIVE EDUCATIONAL TECHNOLOGIES

AI, Chatbots & Robots

Virtual & Augmented Reality

Social Media in Education

**Technology Enhanced Learning** 

#### **TEACHER TRAINING & ED. MANAGEMENT**

ICT & Digital Skills

Professional Development of Teachers

**Educational Management** 

#### **ACTIVE & STUDENT-CENTERED LEARNING**

Gamification & Game-based Learning Experiential Learning Problem & Project-Based Learning Soft Skills Development Pedagogical Innovations

#### ASSESSMENT, MENTORING & STUDENT SUPPORT

Assessment & Evaluation Rethinking Assessment in COVID-19 Times Feedback for Learning Tutoring & Coaching Student Support & Motivation

#### **EDUCATIONAL STAGES & LIFE-LONG LEARNING**

From Pre-school to Secondary Education Non-Formal and Informal Learning Transition to the Job Market Developing Entrepreneurship in Education Life-Long & Workplace Learning

#### **OUALITY & IMPACT OF EDUCATION**

Quality in Education
Experiences and Challenges in Curriculum Design
Sustainability & Social Impact of Education
Links between Education and Research
University-Industry Collaboration
Mobility & International Projects

#### **MULTICULTURALITY & INCLUSION**

Multicultural Education Diversity Issues Special Educational Needs Inclusive Education

#### STEM EDUCATION

Mathematics & Statistics Engineering Education STEM Experiences

#### LANGUAGE LEARNING AND TEACHING

Foreign Languages Language Learning & Translation Studies Teaching Foreign Languages during the Lockdown

#### **DISCIPLINE-ORIENTED SESSIONS**

Architecture & Interior Design Education Health Sciences Education Computer Science Education Business & Tourism Education

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# COPYRIGHT LITERACY FORMATION AMONG STUDENTS AT UNIVERSITY INFORMATION ENVIRONMENT: SURVEY RESULTS

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#### Abstract

Introduction: With the advent of Internet technology in the media, information in the media has gained new value, became a resource and service that will be increasingly valued and sought after. In the new media, everyone is an author of content, he produces, distributes and uses journalistic products in modern societies. An essential component of the information society is intellectual property knowledge, in particular copyright and related rights. The dynamic changes in higher education have opened horizons of new priorities, which draw attention to new current areas of everyday life. Intellectual property has become even more relevant with the increasing opening of people to create and promote their work in increasingly accessible online media.

Aim: Firstly to present the concept of a project at the University of Library Studies and Information Technologies "Model for research and increase of copyright literacy in the media in a university environment" and secondly to outline the methodology and the survey results of the project, which aims to establish, systematize, summarize and analyse the current level of awareness about copyright issues at university environment among trainees in the field of media.

Methodology: The survey instrument was developed by the authors in order to collect data, regarding student's knowledge, awareness levels and attitude of copyright issues. Because of the national scope, during the development of the questionnaire, national legislation and WIPO guidelines were primarily used. The questionnaire consists of 4 panels in 40 main questions and includes mainly closed (some based on 5-point Likert Scale) and few open questions.

Presentation: The survey was conducted in nine universities in Bulgaria, in the field of media and journalism in the period 1<sup>st</sup> April – 26<sup>th</sup> May 2021. To achieve maximum accuracy in the study of general aggregation, there is a limit, which relates only to students in degree "Bachelor", "Master" and "PhD-candidates". The study was done on the principle of systematic random selection with stratification to 10% of the students in the mentioned field in other words 449 effectively surveyed Bulgarian students. Data collection was carried out by Google survey.

Results: The survey provides information on copyright literacy and the attitude of young people to intellectual property in the modern information society and was conducted at a time when the rights of authors and journalists are in focus and they need to be valued. In this sense, it can be assumed that the answers of the respondents indirectly influence the public debate on the topic of intellectual property. The received information serves as a starting point for the Model for increasing copyright literacy in the media as a measure for determining the framework of a training course on copyright among students.

Conclusion: The conducted survey is an attempt for a comprehensive study of the copyright competence of young people, how intellectual property knowledge is formed, how media content is used, and how much the work of journalists is respected. Questionnaires made according to the characteristics of the issue measure both the level of knowledge and the level of information and types of information sources, the reasons for the level of knowledge, the main reasons and prerequisites for it, assessment of opportunities for change, recommendations for improving the situation in the university environment.

Keywords: copyright literacy, intellectual property, university environment, media.

## 1 INTRODUCTION

The invasion of Internet technologies in media, the evolution of the information society, the new nature of modern communications in the globalized world we live in have changed the world. Information in the media has gained new value, it has become a resource and service that will be increasingly valued and sought after. In the new media, everyone is an author of content, they produce, distribute and use journalistic products in modern societies. An essential component of the information society is knowledge of intellectual property, in particular copyright and related rights.

The dynamic changes in higher education have opened horizons of new priorities, which draw attention to new current areas of everyday life. Intellectual property has become even more relevant with the increasing opening of people to create and promote their work in increasingly accessible online media. Therefore, it is necessary to constantly enrich the knowledge on this issue in order to ensure optimal use of information and media resources. In this regard, and in pursuance of the objectives of a project funded by the Research Fund of the Ministry of Education and Science on "Model for research and enhancement of copyright literacy in the media in a university environment", a survey was conducted to examine copyright competence of students who are trained in direction 3.5. "Public Communications and Information Sciences" at the University of Library Science and Information Technology (SULSIT) - Sofia, and in specialties related to media and creativity. The task is to establish the level of knowledge, competencies and respect for copyright and measure changes in public attitudes towards copyright in the media.

The survey was conducted within the implementation of the Work Program of the project "Model for research and enhancement of copyright literacy in the media in a university environment", in a competition for basic research of young scientists and postdoctoral students, with contract № KP-06-M35 / 1 of 18.12 .2019. This study examines the level of knowledge and the need to increase knowledge of intellectual property rights, in particular copyright and related rights among students from nine universities. The conducted survey is an attempt for a comprehensive study of the copyright competence of young people, how intellectual property knowledge is formed, how media content is used, and how much the work of journalists is respected. Questionnaires, made according to the characteristics of the issue, aim to measure both the level of knowledge and the level of awareness and types of information sources, the reasons for the level of knowledge, the main reasons and prerequisites for said knowledge level, assessment of opportunities for change, recommendations for improving the situation in the university environment. The survey provides information on copyright literacy and the attitude of young people to intellectual property in the modern information society and was conducted at a time when the rights of authors and journalists are in focus and they need to be valued. In this sense, it can be assumed that the answers of the respondents indirectly influence the public debate on the topic of intellectual property.

The main goal of the research is to establish the current state of the researched issues among the students at SULSIT and among students who study in similar specialties in media, art and creativity. The obtained results, established findings and conclusions are basic in order to measure the changes that will occur with the introduction / implementation of training courses on copyright and related rights in the media, among students.

The task of the survey is to summarize the information collected, to establish the attitudes of respondents, to trace their attitude to the issues discussed in terms of practices of free use of journalistic materials by the media and the future of this situation, and to create a methodology of a training course to form copyright literacy in students.

#### 2 METHODOLOGY

The survey was conducted in the period April 1 - May 26, 2021. It examines the literacy of students in the field of copyright and related rights in the media at a time when we live in and through the media, creating media content every minute. The study of copyright literacy is conducted by the method of direct survey, which implies a very fast collection of a lot of diverse information. For this purpose, a methodology and questionnaire tools were developed for conducting the survey, in which the respondents expressed understanding for a current problem in the modern information society, namely higher education and media policies related to copyright and related rights, as well as media literacy as part of information literacy in the university environment, the attitude towards fake news, propaganda and protection from the dangers of the network. The overall goal of the study is to establish the opinion and assessment of the level of knowledge of intellectual property rights, in particular copyright and related rights, among students - representatives of key communities determined by the rating system of universities in Bulgaria.

The specific goal of the study is to use the obtained information as a starting point against which to measure in the future the effect of the Model for increasing copyright literacy in the media.

The survey precedes the creation of a model for increasing copyright literacy in the media, and its results will be a measure to determine the framework of a training course on copyright among students.

The territorial scope of the study is 9 universities, distributed throughout the country - Sofia, Blagoevgrad, Shumen, Burgas and Plovdiv, although the geographical location is not relevant to the report. The target groups are representatives of the student community - students majoring in direction

3.5 - Public communications and information sciences and in similar specialties such as journalism, media, PR, public relations, arts, creativity.

The present study aims to highlight the reasons for such attitudes so that key policies to increase copyright literacy in the media can be identified.

## 3 RESULTS

The questionnaires include standard closed-ended questions with the possibility to choose an answer from among the alternatively presented ones, as some of the questions are provided with more than one answer. Questions have also been formulated that explore in depth the opinion of the respondents and the respondents have been given the opportunity to formulate a free text.

The questionnaires received in the course of the survey present the opinion of students in three groups - bachelors, masters and doctoral students. The total number of processed questionnaires is 449 (four hundred and forty-nine). It is important to note that the respondents answered all the questions in the survey. From this it can be concluded that the respondents are related to the issue and treat with due respect the issues raised. According to the number of questionnaires, the results obtained are as follows: bachelors - 357 (79.510%), masters - 61 (0, 135%), doctoral students - 31 (0.069%).

From a statistical point of view, the percentage of respondents in the survey is high enough - 449 respondents. Despite the specifics of the questions and the different interests of the audience - different specialties, among the respondents the largest number is those with a bachelor's degree. As can be seen from the data on educational qualification, showing a position regarding copyright literacy in the media, are students who are currently studying and are engaged in a university environment. The number of masters and doctoral students, compared to the total number of surveyed bachelors, is significantly less, which shows the commitment of students in the educational degree "bachelor" to a greater extent - it is very likely that the reaction is due to media literacy in secondary education. The largest percentage of respondents (48.78%) are from SULSIT, followed by Plovdiv University "Paisii Hilendarski" (23.83%).

Women are more active among the respondents - 84.98%, compared to 15.02% men. 292 of the respondents are women and 157 are men - 65.033% women and 34.966% men. This definite imbalance may be related to the feminization of the journalistic profession, as well as that of the humanities and social sciences. The obtained data allow to draw a conclusion about the emphasized interest and commitment of the students to the conducted research, as well as about the importance and necessity of conducting research on this issue. The high percentage of respondents is a guarantee of a high level of reliability and representativeness in relation to the results of the survey among students. The high activity of students shows that there is a significant reserve among young people in the university environment, which should be optimally used in order to increase copyright literacy in the media.

The questionnaires include a number of identical questions, the answers to which will be presented and analyzed in parallel. There are also specific questions to the respondents, which will be presented independently.

The first question in the questionnaire aims to establish the activity of respondents in the media. The question is "What do you do most often", and the possible answers are: I watch TV - news, publicist programs; I listen to the radio news; I read periodicals; I read news online; I read a book (printed or electronic); I play video or computer games; They use the Internet on their phone. A total of 62 different multiple-choice answers were given to this question, the most common multiple-choice answer (in 9.8% of cases or 44 answers) being "Reading news online, Reading a book (printed or electronic), I use the Internet on my phone". The question examines the participation of respondents as users of media content, which suggests that in the next answers they will be influenced by their direct participation in the media and their personal satisfaction. Regarding the usefulness of the media used by the respondents, the second question "Which media is the most useful and valuable for you" gives the following results: Internet, Social Networks" (cited by 16% of respondents).

As can be seen from the table below, the Internet is mentioned as a possible answer in 76.5% of the multiple answers.

Table 1. Usefulness of Media

Selected Answer	Number	%
Internet	153	34,1
Internet, Social networks	72	16,0
Print media	9	2,0
Print media, Internet	12	2,7
Print media, Social networks	2	0,4
Radio	7	1,6
Radio, Internet	11	2,4
Radio, Internet, Social networks	3	0,7
Radio, Print media	1	0,2
Radio, Print media, Internet	2	0,4
Radio, Social Networks	2	0,4
Social media	34	7,6
Television	31	6,9
Television, Internet	36	8,0
Television, Internet, Social Networks	37	8,2
Television, Print media	2	0,4
Television, Print media, Internet	4	0,9
Television, Print media, Internet, Social networks	2	0,4
Television, Radio	5	1,1
Television, Radio, Internet	7	1,6
Television, Radio, Internet, Social Networks	3	0,7
Television, Radio, Print media, Internet	1	0,2
Television, Radio, Print media, Internet, Social networks	6	1,3
Television, Radio, Social Networks	1	0,2
Television, Social networks	6	1,3
Total	449	100,0

It is not a surprise and it is a well-known fact that the modern information society is looking for fast and convenient access to information through electronic and new media. In this sense, providing an immediate and constant flow of information to electronic media and social networks could be part of a strategy to increase copyright literacy in the media and engage the attention of learners - modern generations, who are among their main users.

The next question clarifies respondents' satisfaction with the content they use. The question is: What types of information do you find most interesting in the media? Possible answers News and information programs; Documentaries and documentary information; Sports information and broadcasts; Youth programs; Entertainment programs; Talent discovery programs; Fashion; TV series / Soaps; Movies; Music, music videos and programs; Culture; Nature and nature conservation; Business and finance; Computers and technology; Games; Religion; I can not decide; Other type of information; are configured as follows: The most frequently mentioned in the multiple responses are "News and news programs" (178 out of 449 responses), "Documentaries and documentary information" (105 out of 449 responses) and "Soaps / series" (91 out of 449 responses) (See fig.1).

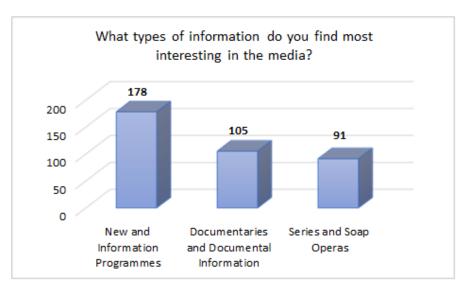


Figure 1. Interesting information in Media.

Regarding how critical the respondents are regarding the media content and whether they evaluate the information in it, the most common answer to this question is "Every day" in 44.99% of cases. Other answers: During the day; Twice a week; Once a week; Once a month they are evenly distributed.

The question "Have you created any of the following media content in the last year?" offers the following answers: I wrote literary works (book, essay, poem, blog, article); Video or audio materials (film, animation, song, video, meme, photo); I wrote a letter to the newspaper; I wrote a news story or a magazine article; Something else. Among them, the respondents chose as follows: To this question, the largest percentage of respondents (49.89%) answered with "I did not create", followed by "Video or audio material" (film, animation, song, video, meme, photo, etc.) ", indicated by 14.48% of the respondents.

The next question in the survey "How familiar are you with copyright?" Is closed and gives several alternative answers: very small, small, medium, high, very high, which represent a scale for assessing personal opinion about the degree of knowledge.

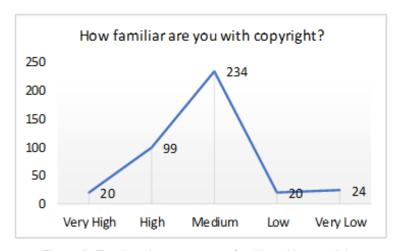


Figure 2. To what degree are you familiar with copyright.

It is assumed that respondents who know the right to intellectual property will give an answer in the positive scale of evaluation, i.e., this question introduces the respondents to the specifics of the study and the specifics of the topic. As can be seen from the graph, the majority of respondents state that they are moderately familiar with copyright (234 out of 449 respondents); 24 are not familiar; 5.35% know very little; 22.05% (99 people) state a high level of knowledge (See fig.2).

With the next question "To what extent are you interested in media copyright issues? the aim is to find out to what extent the respondents, users of media content, would be interested in copyright. The largest percentage (43.88%) of the respondents are moderately interested in issues related to copyright in the media.

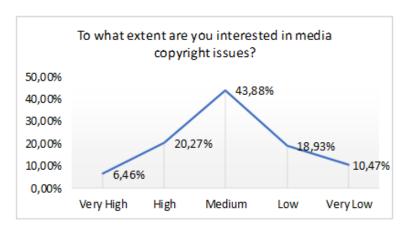


Figure 3. To what degree are you interested in questions, related to copyright in media?

For the purposes of the analysis, it is of particular interest the respondents who are interested in issues related to intellectual property rights, in particular copyright and related rights. Because they must be the object of proactive communication, the main efforts must be directed to them and through various communication models to work to increase copyright literacy in the media in a university environment. Through the method of persuasive communication, which provides sufficient initial information, seeks commitment, understanding and empathy on certain issues, the ultimate effect of support and a positive attitude to change can be achieved. The segment of very few stakeholders is much easier to integrate into the group of medium stakeholders. It is necessary to take into account the fact that in percentage terms are close the groups of those who are highly interested - 20.27%, and those who are slightly interested - 18.93%. Only 6.459% indicated that they were very interested in copyright issues - i.e., from the point of view of communication theory, it is more important for them to receive new information in order to increase their current knowledge than to be persuaded. This is the group to which the topic is somehow familiar, but it is not enough (See fig. 3).

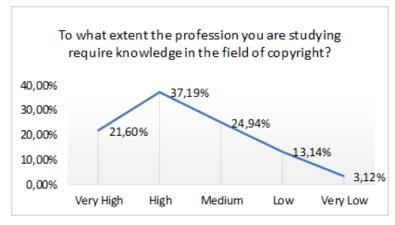


Figure 4. Does the profession you are studying require copyright knowledge?

In terms of professional orientation and competence, the question is "To what extent does the profession you are studying require knowledge in the field of copyright?" The largest percentage (37.19%) of respondents answered "High" (See fig. 4).

To the question "Are you interested in copyright in the media you read on the Internet?" The answer "I am very interested" was given by the smallest number (38) of respondents.

It is noteworthy that the percentage of those who identify themselves as 'slightly interested' (112) is almost equivalent to the percentage of those who respond as 'I'm not interested, I'm interested' (93). The majority of respondents rate their commitment to the copyright of the authors whose works and materials they read, rate "rather interested" - 157, "slightly interested" is the rating of 112 respondents, 93 rate "As much as I'm not interested, so much I'm interested", and "not interested at all" - 49. Almost as many are those who are very interested.

The conclusion that needs to be drawn is that the respondents are not indifferent to the topic, but there are also a large number of them who believe that the respect for the work of the authors of media content is not up to standard. The lack of interest can be expressed in a lack of commitment to the problems of intellectual property rights, in demotivation for creativity and uniqueness, as well as in a lack of activity and position on the issue in the university environment.

The findings call for measures to improve intrinsic motivation for knowledge of intellectual property rights issues.

The conclusion to be drawn is that the level of copyright literacy among students is medium and low. This position is expressed as a percentage of the majority of respondents. In this sense, the survey with the questions raised in this regard confirms the well-known fact of a critically low level of society with regard to copyright and related rights. If there is a focus that needs to be addressed, it is the assessment of those respondents who state that they are not interested in copyright in the media. They must be actively involved in the process of increasing copyright literacy, and this undoubtedly requires a training course with a practical focus for students studying in specialties that are directly related to intellectual property rights. This question in the questionnaire looks for possible reasons for low copyright literacy, but can also be considered as a control in terms of literacy on copyright issues in the media. Those who expressed an opinion on the problem are commensurate with the results obtained on the issues of copyright literacy in the media in general, which confirms the control question made above.

The survey seeks an answer to the question of how well the respondents are informed about the opportunities for additional training on the commented issues. To the question: To what extent are you interested in media initiatives to raise your awareness of copyright issues? The largest percentage (37.64%) of respondents answered "I am interested" in this question. The general conclusion is that most respondents follow initiatives aimed at raising awareness on copyright issues, albeit to varying degrees. 19.15% "As much as they are interested, so much I am not interested", 24.72% "A little interested". The least are those who are "very interested" - 6.24%.

It is obvious that the respondents assess their awareness of copyright issues in the media as insufficient.

The survey examines the extent to which copyright is present in the curricula of programs. To the question "To what extent is the issue of copyright in the media covered in the study content you study?" The largest percentage (27.62%) of the respondents answered "Low" to this question. The answers provided are alternatives: Very high, Very low, Low, High, As low, As high.

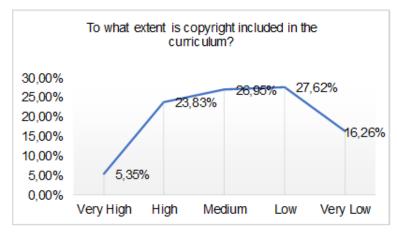


Figure 5. To what extent is copyright included in the curriculum?

According to 16.26% of the respondents, copyright in the media is present in a very low degree in the educational content, while 17.82% believe that it is highly represented. A very small part (5.35%) indicate that the researched issues are present to a very high degree in the curriculum they study.

Perhaps from a statistical point of view, the approximate percentage of respondents with a high grade - 17.82% and those with a very low grade - 16.26%, overlapping in quantitative terms, is interesting. The close in percentage opinions of the respondents suggest that copyright in the media is not covered in the curriculum and more information is needed. Based on the data obtained, a more active presentation of copyright in the media through a proactive method of communication with learners can be recommended. It is necessary to optimize the current training approach, identify measures and take

action to promote intellectual property rights in the media. The findings are related to objective circumstances given the fact that the right to intellectual property is an object of civil law, which is not sufficiently represented in the educational content. Specialized courses, additional classes, practical exercises will strengthen the capacity of disciplines that have points of contact with the media and media policy, as well as contribute to raising awareness and the need to broadcast uniform messages in the public space by students, journalists and society to promote of intellectual property rights in life.

The conclusion is that in addition to the need to more actively provide information on intellectual property rights, it is necessary to determine the type of information that students are looking for and to specify whether it is copyright, related rights, industrial property and practical information, which concerns the respondents as participants in the media content.

An expert in the field of sociology could define, analyze and differentiate the reliability of the collected data according to the objective criteria, taking into account the possibilities for influencing the opinion of the respondents by side factors.

## 4 CONCLUSIONS

The survey practically confirms the well-known fact regarding the low copyright literacy among students of the generation living in the media. The control questions confirm the initial findings of the respondents. There are no surprises in the answers, asking the opinion of the respondents regarding the use of materials from the Internet without paying for it.

Many of these answers confirm the lack of knowledge on the issue, susceptibility to inertia. The findings that circulate daily in the public and media space that everything is free on the Internet are accepted by the respondents as an indisputable fact and are not questioned. In this sense, proactive communication, providing sufficient information on intellectual property rights, continuing education will gradually lead to higher awareness, understanding and respect for journalistic work, the formation of legal culture. The evaluation of the respondents poses an extremely serious problem for the need to organize and conduct continuing training on intellectual property in the media.

The recommendations regarding the results of the survey are related to the need to increase the copyright competence of creators and users of media content, expressing a common position on leading topics in the media related to intellectual property rights, unity of messages of the creators of media content, active partnership with media and copyright-related institutions such as the Ministry of Culture, the Patent Office, WIPO, non-governmental organizations working on media literacy, in order to gain more popularity and increase the legal culture and in particular copyright competence of young people in Bulgaria.

Based on the presented data, it can be summarized that the respondents identify identical problems, which confirms the thesis of the lack of copyright competence among trainers in the creation and use of media content. Despite a number of courses in law, an educational course is needed to ensure media copyright literacy among students.

## **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 Eng. Evelina Lyubomirova Zdravkova-Velichkova, PhD.

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