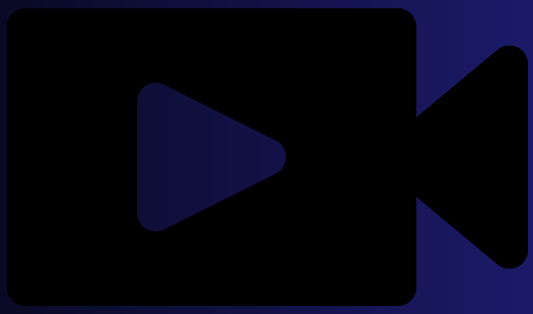


METHODOLOGY

Researching the needs of schools for the application of video content for educational purposes and their capacity for development in that context.

НАЦИОНАЛНА АГЕНЦИЈА
ЗА ЕВРОПСКИ ОБРАЗОВНИ
ПРОГРАМИ И МОБИЛНОСТ

Co-funded by the
Erasmus+ Programme
of the European Union

1.Introduction....3
1.1 About the project ...and Action!....5
1.2 Objectives....7
1.3 Activities and Outputs of the Project....8
1.4 Anticipated Impact of the Project....10
2.Project goals....12
2.1 Application of video content for educational purposes....13
2.1.1 North Macedonia....15
2.1.2 Bulgaria....21
2.1.3 Slovenia....23
2.1.4 Spain....37
2.1.5 Serbia....46
3. Methodology....50
3.1 Research problem....51
3.2 Subject of research....52
3.3 Purpose and tasks of research (general and special)....53
3.4 Sample of the survey....54
3.5 Research methods, techniques and instruments....55
4.Survey....56
5. Analysis and interpretation of reaserch....62
5.1 Survey Results Analyses....63
5.1.1 North Macedonia....63
5.1.2 Bulgaria. 66
5.1.3 Serbia....68
5.1.4 Slovenia....72
5.1.5 Spain....73
6....and Action! partners....77

1. Introduction

In recent years, video-based learning has emerged as a popular and effective teaching method in European schools. The COVID-19 pandemic has further accelerated this trend, with many schools adopting online and blended learning models that rely heavily on video-based instruction. According to a report by the European Commission, "Online and video learning provides flexibility, accessibility, and personalization of learning, which can potentially enhance the quality and effectiveness of education" (European Commission, 2020).

Research has also shown that video-based learning can improve student engagement and knowledge retention. In a study conducted by the University of Washington, students who watched video lectures performed better on exams and demonstrated a deeper understanding of the material compared to students who attended traditional lectures (Guo et al., 2014). Similarly, a study by the University of California found that "students who watched videos that supplemented their course materials had better recall of information, performed better on quizzes, and had higher overall grades than students who did not watch the videos" (Young et al., 2013).

Video-based learning also offers greater accessibility for students with diverse learning needs. According to a report by UNESCO, "Video and multimedia technologies can make learning more flexible, accessible and inclusive for learners with different backgrounds and abilities" (UNESCO, 2013). This is particularly important for students with disabilities or those who live in remote or underserved areas.

Despite the growing popularity of video-based learning in European schools, there is still much to be learned about its effectiveness and how it can be best integrated into the education system. As highlighted in the Education and Training Monitor 2020 report by the European Commission, "the full potential of digital education has yet to be realized" (European Commission, 2020, p. 16). This report also emphasized the importance of improving digital competences of educators, integrating digital technologies into the curriculum, and promoting innovative pedagogical approaches that enhance student learning.

This Project, conducted by ...and Action! partners, aligns with the European Commission's call for "more research and evaluation of digital education at all levels of education and training" (European Commission, 2020, p. 16). Moreover, it has the potential to provide European educators with evidence-based insights and practical tools to enhance their use of video-based instruction in the classroom. The aim of this research project is to examine the need for video content creation and application for teaching purposes in European schools, and to investigate teachers' capacity for development in this context.
This project will involve collaboration between schools and educators from different European countries to investigate the following research questions:

What are the most effective video-based teaching methods?

How can video learning be integrated into the existing curriculum?

What are the benefits and challenges of video learning in different subject areas?

How can video learning support the development of 21st-century skills such as critical thinking, problem-solving, and digital literacy?

Through this project, we aim to provide European educators with evidence-based insights and practical tools to enhance their use of video learning in the classroom. Ultimately, this will contribute to the improvement of education outcomes and prepare European students for the challenges of the future.

1.1 About the project ...and Action!

The "...And action!" project is an international, Erasmus+ KA2 initiative spearheaded by the Macedonian Cinematheque with the overarching objective of augmenting the quality of the educational experience by seamlessly incorporating video content into the curriculum. This innovative project, slated to span two years from October 2022 to October 2024, acts as a collaborative venture, bringing together a diverse consortium of partner organizations from Bulgaria, Serbia, Slovenia, and Spain. These partner organizations, united by their shared commitment to transforming the educational landscape, are pooling their collective expertise and resources to champion the cause of integrating video content into the classroom.

Supported by the Macedonian National Agency for the Erasmus+ Programme, this ambitious project is driven by the vision of harnessing the immense potential of video content as a versatile and impactful tool in the field of education. The project recognizes that video content, with its unique ability to engage multiple senses, can serve as a powerful medium to enhance the interactivity, engagement, and retention of learning experiences. By integrating video content into the teaching process, educators can craft more immersive, memorable, and compelling learning experiences, ultimately contributing to a more effective and enriching educational process.

A cornerstone of the "...And action!" project is the commitment to equipping 80 teachers, drawn from the participating countries, with the requisite skills and knowledge to create high-quality, educationally valuable video content. This goal is to be realized through a series of training sessions conducted by professionals in the realm of video production and editing. These training sessions will provide hands-on, practical instruction, empowering teachers with the technical and creative skills needed to produce compelling video content tailored to their specific teaching needs. By enabling teachers to take an active and informed role in the creation of video content, the project aims to catalyse the enrichment of teaching methodologies, diversification of learning resources, and overall enhancement of the student learning experience.

In parallel with its emphasis on promoting the importance of video content and training teachers in video creation, the project is also dedicated to conducting in-depth, systematic research on the utilization of video for educational purposes, presented in this document. This research Endeavor encompasses an exploration of the current practices, associated challenges, and perceived benefits of using video content in schools across the participating countries. The research also investigates the perceived barriers to the integration of video content and the potential strategies to overcome these challenges. The findings from this comprehensive research provide valuable insights into the current state of video content usage in education, serving as a foundation for informed recommendations on how video content can be more effectively and optimally integrated into the curriculum moving forward.

The "...And action!" project is founded on the principle of collaboration, bringing together partner organizations from diverse geographical and cultural contexts, as well as varied backgrounds in education, research, and video content creation. This dynamic consortium of partners will forge a collaborative network of educational professionals, researchers, and video content creators, working collectively to advance the integration of video content into education. This network will serve as a dynamic platform for exchanging knowledge, sharing best practices, disseminating resources, and fostering an ethos of innovation and creativity in the field of education. Through this collaborative approach, the project seeks to galvanize a lasting and widespread transformation in the educational landscape, championing the cause of innovative, engaging, and effective teaching and learning through the integration of video content.

1.2 Objectives

Advocating for the Importance of Video Content in Education

The "...And action!" project aims to bolster the understanding and appreciation of video content as a crucial and transformative educational tool. By actively engaging teachers and schools across five diverse countries, the project seeks to highlight the multifaceted benefits that video content brings to the educational landscape. This engagement is crucial to generating awareness of the numerous ways in which video can enhance the learning experience by fostering a more dynamic, interactive, and visually stimulating environment. The initiative is centered on encouraging educational stakeholders to recognize and embrace the advantages that video content offers in terms of engagement, retention, and creativity.

Developing Video Creation Skills Among Teachers

A significant component of the project involves providing training to 80 teachers from the partner countries in the art of creating effective and compelling video content for educational purposes. This training is tailored to cover a spectrum of skill levels, from basic to intermediate, ensuring that all participating teachers can benefit, irrespective of their prior experience with video creation. The courses will be conducted by professionals with extensive experience in video production and editing and this process is led by the Macedonian Cinematheque. The aim is to equip educators with the skills and knowledge necessary to produce engaging, informative, and high-quality video content for their students. By doing so, the project aims to empower teachers to take the lead in creating customized video materials that align with their unique teaching styles, curriculum requirements, and students' needs.

Exploring the Current State of Video Usage in Education

In order to understand the prevailing trends, challenges, and opportunities associated with the use of video content in education, the project will carry out comprehensive national research studies in each of the partner countries. These studies will delve into the role and impact of video content within schools, providing valuable insights into current practices and the extent of video integration in the teaching and learning process. Furthermore, the research will examine the perceived benefits of using video content, as well as any challenges faced by educators in effectively implementing video resources in their classrooms. The findings from these studies will be instrumental in identifying potential areas for improvement and suggesting actionable recommendations for optimizing the use of video content in education. By understanding the current state of video usage.

1.3 Activities and Outputs of the Project

Creation of a Specialized Online Platform for Guidance for Video Content Creation

An integral and cornerstone component of the "...And action!" project is the development of a comprehensive and dedicated online platform specifically tailored to meet the needs of educators interested in creating video content for educational purposes. This platform will function as a repository of resources, tools, and instructional materials, geared toward assisting educators in the entire process of video content creation. This will include video editing tools, user-friendly step-by-step tutorials for different levels of expertise, and illustrative examples of best practices in creating impactful video content for teaching and learning. In addition, the platform will provide access to a collaborative community of educators, allowing users to share experiences, showcase their creations, and exchange feedback. Designed with a focus on user-friendliness and accessibility, the platform seeks to lower the technical barriers that often deter educators from venturing into video content creation. By providing a one-stop hub with all the necessary tools and resources, the platform aspires to inspire and empower educators to integrate video into their teaching methods, enhancing the overall educational experience for their students. In this way, the platform aims to contribute to the ongoing transformation of educational practices through the integration of innovative and interactive video content.

Teacher Training Courses on Video Production and Editing

Another vital activity of the project involves the organization and delivery of hands-on teacher training courses on video production and editing. These courses will be conducted in the partner countries of Macedonia, Bulgaria, Slovenia, and Spain, and will accommodate a total of 80 teachers, with 20 participants from all the participating countries in each course. This approach ensures a diverse and cross-cultural learning environment, fostering the exchange of ideas and insights among educators from different regions. These training courses will delve deeply into the practical aspects of video creation and editing, equipping teachers with tangible skills and techniques that can be immediately applied in their classrooms. In addition to technical skills, the courses will also address pedagogical considerations, helping teachers create video content that aligns with educational objectives and enhances student learning. The training sessions will be delivered by seasoned professionals in the field of video production, who will provide high-quality instruction, personalized guidance, and hands-on practice for the participants.

Promotional Conferences to Showcase Project Outcomes

To highlight the successful completion of the project and share the achievements, experiences, and insights garnered throughout the initiative, promotional conferences will be held in Macedonia, Spain, and Bulgaria. These conferences will serve as platforms to present the results of the project, celebrate the work and progress of the trained teachers, and disseminate the findings of the national research studies on video usage in education. By convening diverse stakeholders from the educational community, including educators, policymakers, researchers, and practitioners, the conferences aim to foster dialogue and cross-pollination of ideas around the role and importance of video content in education. These events will provide opportunities for participants to advocate for the continued and expanded integration of video content into the educational process, share their experiences and best practices, and contribute to the ongoing discourse on innovative and effective teaching methodologies. Furthermore, the conferences will serve as a space for showcasing and recognizing the achievements of the trained teachers, highlighting their contributions to advancing the field of education. Ultimately, through these conferences, the project seeks to leave a lasting and positive impact on the educational landscape by shining a spotlight on the transformative potential of video content, and by inspiring and encouraging educators and policymakers to continue exploring new and innovative approaches to teaching and learning.

1.4 Anticipated Impact of the Project

The "...And action!" project, with its broad and ambitious objectives, is well-positioned to make a transformative and lasting contribution to the educational sectors of the participating countries. Its focus on video content creation and utilization in the teaching process will undoubtedly foster a more dynamic, engaging, and immersive educational environment, leaving a significant impact on the way education is delivered and experienced.
The teachers who participate in this project will not only acquire invaluable skills in video content creation but also experience a shift in their teaching methodologies. Armed with new capabilities, they will be better equipped to create more stimulating lessons that cater to diverse learning styles and preferences.

The ability to create customized video content will empower teachers to design lessons that capture students' attention, foster deeper comprehension, and provide a more interactive and memorable learning experience. The professional development opportunities offered through the project will enhance teachers' self-efficacy, encourage a more innovative approach to teaching, and contribute to their long-term career growth.

The schools that embrace video content integration will reap substantial benefits by creating a more interactive and engaging learning environment. The use of video content in the curriculum allows schools to offer a richer educational experience that appeals to different learning modalities. By providing a mix of visual, auditory, and kinaesthetic learning opportunities, schools can cater to the needs of a wider range of students and enhance overall academic performance. Moreover, video content enables schools to transcend geographical and time constraints, providing students with access to a overabundance of resources and experiences that may not be otherwise available.

Beyond the immediate stakeholders, the project's impact will be felt throughout the broader educational community. The research insights, resources, best practices, and experiences shared through the project will provide a roadmap for other educators and institutions interested in integrating video content into their curriculum. The national research studies conducted as part of the project will offer valuable data and insights into the current state of video usage in education, helping to inform future policy decisions, identify potential areas for improvement, and shape the trajectory of video integration in the classroom.

The online platform created by the project will serve as a valuable and enduring resource for educators seeking to harness the potential of video content in their teaching practices. By providing access to video editing tools, tutorials, and best practices, the platform will lower the barriers to entry and encourage more educators to explore the world of video content creation. This ripple effect will lead to the continued growth and adoption of video content in the educational process, fostering a more innovative and dynamic educational landscape.

The promotional conferences held at the conclusion of the project will further amplify the impact of the initiative by showcasing the results, achievements, and lessons learned. These events will serve as platforms for sharing experiences, advocating for the importance of video content in education, and fostering a community of like-minded educators and stakeholders. The conferences will also provide an opportunity to celebrate the accomplishments of the trained teachers and recognize their contributions to advancing the field of education.

In conclusion, the "...And action!" project aspires to leave a lasting and transformative impact on the educational landscape of the participating countries. By equipping educators with the skills, knowledge, and resources needed to fully harness the potential of video content, the project aims to foster a culture of innovation, creativity, and inclusivity in the teaching and learning process. The project's legacy will be reflected in the continued growth and integration of video content in the classroom, the enhanced teaching methodologies and experiences, and the broader adoption of innovative approaches in education. Ultimately, the project seeks to contribute to a more engaging, interactive, and enriching educational environment for all students, teachers, and educational stakeholders.

2. Project goals

European Countries have moved towards various Digital Education Action Plans development of the framework aimed towards video content for educational purposes. This framework includes a set of digital tools and standards for learning that should be done by teachers and will be integrated in the “new normal” when it comes to distance learning processes.
With this project we aim to contribute to development of tools and infrastructure, for full implementation of this EU trend. Video content in the education process is a powerful trend in terms of reformation and modernization of the global education environment. Educational activities must be reformed accordingly to the times in which we live and digitization process are requiring organizational change. With this project we aim to increase the capacity and readiness of education providers to adapt to the challenges of the digital transformation – more concretely to be able to transform their lectures to video formats acceptable for the young people of today.
This project results will influence quality, standardization, and organizational change.
Without a modern, transparent, and credible system, modernization of all processes of education could be unreliable. With this project we will introduce tools and guidance into the regular systems of work with video content and achieve compatibility, as well as standardization. Within this project educational providers will gain skills and needed guidance for such activities. By producing expected project outcomes, we do expect to contribute in enhancing quality assurance by:

- Support for the curricula, based on learning outcomes and micro-credentials
- Defining rules and procedures for inclusion of learners
- Building standardized digital infrastructure for educational video content. Project outcomes are completely in line with the relevant indicators and quality assurance systems.

With these outcomes we will:
- Improve transparency and quality standards;
- Facilitate implementation of European instruments various educational fields;
- Facilitate validation of non-formal and informal learning;
- Increase the employability of learners and assure the confidence of employers that learning achievements and skills are completed;
- Increase the flexibility and opportunities for teachers;
- Improve strategic and cross-sectoral cooperation between different providers across Europe and their internationalization;

2.1 Application of video content for educational purposes

Education business and system have been changing quietly over the past few years. With the increasing use of video in education, one thing has become clear: There is no limit of the number of students who can be educated online.In light of the pandemic, where all students and education providers were limited to their homes, the use of video content has become even more important in the context of providing education. In the education sector, there is a growing desire to move away from traditional textbooks and move towards more comprehensive audiovisual materials. This is advantageous for both students and teachers in today's technology-driven world. Videos, in addition to traditional textbooks, improve the quality of both teaching and learning in both formal, and non-formal education. Several reasons why video is becoming more popular in the classroom and why it is such an excellent teaching tool.

Students' attention is attracted by visual stimulus

Because of the technology that drives our lives, we are used to staring at the screen for a long period of time. Today's students are easily stimulated visually because of their connection to technology. With the help of visual stimulation, the student is more engaged with a concept that is taught to them. It also leaves a more pronounced imprint on students' memory, thus making video-based instructions ideal for retaining information among them.

Video content is a comprehensive way to teach

Using speech, text, and visual elements together allows the instructor to get to the heart of the matter faster than traditional teaching would do it. This allows for more content and dialogue in a shorter period of time, which successfully retains the attention of students.

Video content doesn't have to be complicated. In its most basic form, educational video can consist of audio and text on the screen, almost like lyrical videos. This type of video allows more visualization. Students' brains are easier to absorb and remember a message or lesson when audio and text are combined together into one lesson.

Digital literacy

Today's students should not think of institutional education and digital literacy as two separate things. This should be considered an integral part of the educational process itself. Digital literacy is an essential skill of the 21st century that is required for almost every job.

Students will become more confident and skillful if they are trained in both aspects than they would be if they followed the traditional process of school education. Students can shoot and edit video content on an online video editor and show off their videos to acquire the vital practical skills that will be required of them later in their working lives.

When accompanied by appropriate equipment, education with the help of movies in the classroom is also gaining popularity. However, the effect of the video can be destroyed due to the nature of the technological gadget used or due to a bad connection.

This encourages teachers to release the aforementioned films on different platforms, depending on the quality of the video and the type of equipment that they, as well as students, own.

It has incredible accessibility

YouTube, one of the most popular video platforms in the world, is much more than just a source of pleasure. If you want to acquire a new skill, the materials are easily available on the platform and you are most likely to find thousands of resources and courses in a few minutes by entering the necessary keywords in the search box. The best thing about video-based education is that you can learn at your own speed and from the comfort of your own home. The videos are also portable, which gives faculty and students great freedom in their range of access to the video. Schools need to adapt to these tactics in the distance learning scenario imposed on students due to a pandemic or other circumstances. Access to videos from anywhere and at any time broadens the horizon of educational practices in such a technology-led world.

The opportunities of distance learning are growing at a rapid pace

The market for online courses is bursting. More and more institutions are taking advantage of this trend by using Internet videos for education. This not only demonstrates that the school can reach more students, but also points to the institution's increased opportunities.

The use of videos in online courses eliminates the need for institutions to pay full-time specialists to teach a course. However, it is important to know that respect for someone else's intellectual property is called ethical use and ensuring that videos used in online courses have appropriate permissions is a necessity.

2.1.1 North Macedonia

Film and film art are of great importance for raising the cultural growth of the individual. Many sociologists, pedagogues, psychologists and philosophers agree with the fact that the film plays a special role in building various influences in the young person, from values to stereotypes and prejudices. The film has become a miracle of art, thanks not only to its formal-aesthetic expressive possibilities, but above all to the relationship it creates with the audience. It, in turn, has the role of a collective existence that fulfills common reactions. On the other hand, as exceptions, the reactions of those viewers who, by their character or level of culture, move away from the "ordinary man" of the temporary micro-society made up of moviegoers (Surio, 1971) stand out. The relationship between the film and the audience represents a special communication that, in order to have a positive impact, should be properly directed from the school desks in primary education. Hence, its representation, role and application within education is very important.

The contents of film and film art in our primary education are represented through the subject Macedonian language, area of media culture, with a fund of 10 hours per year. Considering the fact that the film has a great educational value, this representation is at an extremely low level and initiates the need for change in this field. On the other hand, many contents become easier to understand for students if the film is used in teaching for their realization. In this context, documentary films are of special importance and can be successfully used in the teaching of mother tongue, history, geography, society, art education, music education. Unfortunately, in our education, the film is very little represented. There is an extraordinary opportunity in the teaching of the Macedonian language, where through the screening of various works from the world and domestic literature, it is possible to influence the moral, aesthetic and cultural development of the students, more than just with reading the books. After all, it is best if one complements the other. It also has a strong influence on building self-knowledge, on one's own identity, in terms of culture and values.

Unlike today, earlier, within the former Yugoslavia, in 1956, the Federal Center for Teaching and Educational Film was established, and following the example of this center, institutions with a similar name were established in all socialist republics.

In the then Socialist Republic of Macedonia in 1956/1957, the Institute for Cultural-Educational and Educational Film was founded, which in Macedonia has as its main activity the provision of a fund of educational films for the needs of educational organizations. Many schools, not only in the cities, but also in the villages, had fully equipped cinema halls with one or even two projectors, which were used to show films for the needs of teaching, and in the evening, for the local population. Thus, the film became a part of the culture of our people.

In the 60s, the use of film in teaching was particularly present. From the interview with the teacher Risto Popov, who in 1965-1967 worked as a teacher in the eighth grade, the use of films in teaching was very common. He was in charge of procuring them from the Institute for Cultural-Educational and Educational Film in Skopje once a month, and in a specially designed hall in which there were even two cinema projectors, films were presented not only for the needs of teaching, but also for the local population that gathered inthe late evening hours to watch a movie, and all of that had its own cultural and educational purpose. Otherwise, in relation to educational films, the teachers made a list of educational films needed to realize the contents of the corresponding educational subjects, and they were purchased both for social and natural sciences, but also for the Macedonian language. The use of film in teaching was characterized by great enthusiasm, but there were also conditions at that time.

In 1973, it was recommended that the film be used not only in the teaching of the Macedonian language, but also in the teaching of other subjects, such as in geography, physics, biology, chemistry... In other words, the school's commitment to overcome traditional teaching and apply modern technical means such as film, TV and radio school shows, tape recordings, graphoscope, projectors, audiovisual teaching and technical aids was pretty visible. In teaching geography, it is recommended that new terms from the lithosphere, such as volcanoes and earthquakes, relative and absolute height, be processed through readings, but also through films and direct observation. Also, the contents about natural and artificial radioactivity, about nuclear energy, etc. to be processed through pictures, drawings, but also educational films.

The greatest representation of the film is recommended to the teaching of biology. The analysis of the lesson plans showed us that for this subject, teachers are recommended to use the educational films very often, in order to more successfully learn the material. Namely, for all topics and contents, it is recommended that the teachers perform the exercises either through observation of fresh materials (diameter flower, fruit, fungi, moss, ferns...) or through a model, picture film and slide film.

So, the educational film is recommended for almost all teaching topics and content from fifth to eighth grade.

In contrast to the curricula from the beginning of the 70s, when the field of film is represented by 5 hours per year and with much more specific goals and tasks and appropriate contents, already towards the end of the 80s, it is much more neglected, i.e. it is treated more formally than substantively.

There is a noticeable decline in interest in the representation of film in teaching, which is primarily seen in the new curricula, which lose concreteness and fall into a large framework where slowly but surely the interest in educational film or in the application of some documentary film for teaching purposes.

In 2007, primary education in the Republic of Macedonia changed from eight years to nine years of primary education, with three cycles: from the first to the third grade, from the third to the sixth and from the sixth to the ninth grade. In the eighth grade, in the area of Media Culture (10 hours per year), the following goals are set in relation to the film: "To introduce the students to how a film is made, to familiarize them with the synopsis (the plot of the film) and the script (the book of filming), and at the same time the same terms should be adopted by the students, namely: synopsis and scenario. In the curriculum, the following activities are provided for these purposes: appropriate texts (excerpts) from the synopsis and scenario. Exercises for independent writing of a synopsis and scenario based on the student's idea are also foreseen (Curriculum, 2008.14). This content seems to be very ambitious, because writing a synopsis and a screenplay still requires experience in that area and not all students are gifted for such writing, which means that the set goals and the intended content do not correlate.

The teaching in which the film is used as a teaching tool has a much greater value and encourages the students' creativity, and the mastering of the teaching contents is much more interesting, more dynamic and with greater durability of knowledge, but also with a greater possibility of applicability. In fact, the application of the film has a special significance in the cultural development of the young person, so the representation of the film should be much greater. The film can create, on the one hand, aggression, violence, hatred, stereotypes, prejudices, i.e. negative identification with the character (or group), and on the other hand, a noble person with a cosmopolitan view of the world, and a person with critical thinking with a refined taste for film. An art that integrates other arts, above all music, fine art, aesthetics, speech, etc.

There is no doubt that the educational film represents a powerful audiovisual tool with the help of which educational content would be learned in a much different and more interesting way than usual. Among its advantages, we can single out the following:

-The film brings freshness to the teaching and breaks the monotony in educational work.
-The skill to notice reactions, processes, events, incidents, human behaviors, etc. increases.
- The knowledge acquired in teaching in which there is an application of a film or a part of a film is much clearer, more understandable and can be more easily applied in park life.
- The film can be successfully used in all teaching subjects, and it is especially suitable for teaching foreign languages, history, mother tongue, but also natural sciences, art, etc.

From a pedagogical-psychological point of view, the motivation of students is of crucial importance, because it has a very positive effect on the adoption of the contents, because the film enables greater interest.

With the film, the educational and educational goals are successfully realized. Educational goals are related to the acquisition of knowledge, and educational goals are related to the formation of the personality in an educational way. The former influence cognitive development, and the latter the formation of attitudes and values.

Taking into account the time in which we live, the rapid information-technological development, the film offers the possibility of daily application in the teaching of almost all subjects. However, how much the application will be depends on the teacher himself, on his readiness, motivation and desire to apply innovative techniques, modern teaching aids, strategies and methods. The application of the computer in teaching gives the opportunity for the film to be present like never before.

Teachers experiences with the use of educational videos:
I have been teaching ICT in Yahya Kemal College since 2007. I took a break of 5 years and I taught English and ICT in Istanbul. Then from 2016 I am back in Yahya Kemal College. I taught both in high school and primary school.
According to me, using videos in teaching has a positive effect on the students. Classical model of writing, rewriting and explaining sometimes slows down the teaching process. Students need maybe every 10 min. to change the atmosphere to refresh their concentration. I have used videos in teaching from some new application programs using tutorials from several websites.

Students are concentrated while listening to the videos but after the video they always need an extra explanation.
During the pandemic period we have used several online tools teaching and explaining them. One of my colleagues used to do math lessons with video every day. He was recording the tutorial and in that video, there were implemented questions so that students need to watch the video carefully and answer the questions then to go on with the videos.
Several colleagues of mine used short videos but not themselves prepared but ready used from web sites to make their lessons more interesting.
Nowadays when I make lesson visits in my school, I see that some of the teachers use their own videos, some of them use videos from the internet, but some of them unfortunately don't use any type of video.
The classical method of teaching without visualization somehow doesn't take the attention of nowadays' students, because of their everyday use of social media, they have concentrated in visualization.
The usage of videos during the lessons makes lessons more effective, but the preparation, recording, and technical skills of teachers doesn't always give them a chance for them to prepare. Training the teacher, giving them the necessary education, and needed technical conditions would encourage teachers to prepare their own videos, and this would encourage students to concentrate more, study more and understand more easily.

As a parent, I have seen the positive effect of watching video content with an educational character through my children, who watch Natgeo, History, and as younger: Da Vinci, with great interest. The video contents from these (and similar) programs enable learning in an interesting way, with high content quality, packed in a short amount of time, and so effective that they keep the viewer's attention (various topics, elaborated according to the child's age). I believe that television, as a medium that enters every home, has a great power and influence on the education of children (of the population), but there is a lack of quality educational shows, made according to today's generation of students.

During the pandemic, some teachers did not give up teaching and bravely accepted to stand in front of the TV cameras even though they were not really prepared for that role. During that period, a huge number of students learned only that way, following the MTV TV program and from recorded lessons on the Eduino platform. It would be nice if MTV continued to prepare and broadcast such a program, certainly richer in content and more professionally made. I feel the same about recording lessons for the Eduino platform.

Personally, I love video as part of teaching - amateur, spontaneous, I record activities in my classes, of course with the approval of parents, and post them in a closed FB group. In this way, the students have the opportunity to watch the activity at home, and at the same time, the parents are informed and up to date with the activities that we carry out, how we study, how we socialize, etc.

During the pandemic, I taught on Zoom. It was a great challenge and a nice experience for me. I studied daily, corrected myself, analyzed, and looked for a way to make tomorrow's classroom more successful than yesterday's. A facilitating circumstance for me was the age of the students, fifth grade, who are more independent, with acquired work habits and very curious. I received support from students, parents and my family. For some teaching content, we used YouTube videos, invited guests to our online classroom, or recorded ourselves.

The pandemic forced us to learn differently and showed us what needs to be changed/improved in the education system.

That's why I believe that it is necessary for the teaching staff to undergo training that will develop skills to create videos for the needs of teaching, with the aim of higher quality teaching, more motivated students and more successful achievement of the set teaching goals.

References:

Cosic, Sl. Nastavni film u nastavi povijesti, zivot I skola, 2010 br. 24

Film u nastavi (prirucnik za student-buduce nastavnike) (2017), Fondacija Fond B92, Beograd

Филмска енциклопедија (ур. Анте Петерлић) (1986), Лексикографски завод „Мирослав Крлежа“, Загреб

Miljanovic, N.(2002): Obrazovna tehnologija, Po-bijeda, Podgorica

Mikic, K. (2002):Uloga I znacaj medija u zivotu deteta do deset godine starosti

Metodika (casopis za teoriju i praksu u predskolskom, skolskom i visokolskolskoj izobrazbi),Sveuciliste u Zagrebu, Uciteljski fakultet, br.5,2002

Zbornik uciteljske akademije u Zagrebu, Sveuciliste u Zagrebu, Vol 4.br.14 (151-163

Tezak, St. (2002), Metodika nastave filma, Skoljska knjiga, Zagreb

2.1.2 Bulgaria

The use of video content in the educational process in Bulgaria is not new. In the 50-70s of the XX century, the technology of using educational films was widely introduced. Educational films were created in almost all subjects. In the strict sense of the word, the term "educational cinema" means cinema screenings, which are used only in the process of organized education. In these screenings, auditory-visual (audio-visual) didactic material is reproduced, most often as part of a training program. In the 1970s-1980s, educational television appeared. It is training using terrestrial educational transmission, a form of distance audio-visual learning. Nowadays, a cinematic film is practically unsuitable for use in education. One of the modern ways of storing information is video recording. It is created in accordance with the curriculum and is also used to optimize the educational process. It is often used in Bulgarian schools, especially during distance learning, because it has a great impact on students. Their ability to establish and visually reveal the internal and external connections of the studied objects, facts, phenomena with the surrounding reality, with the past and the future, provide material for comparison, analysis and synthesis, separate the main thing in the site and convincingly show the details — all this makes video recordings a valuable tool for learning. Learning video recordings can be divided into professional (studio) and homemade (amateur).Studio video recording is most often a recording from a TV show or video. Videos are created more and more, but unfortunately many of them, well executed technically, are often little effective for use in the learning process, as psychological, pedagogical and methodological aspects are not taken into account in the preparation of the learning material. That's why the teacher should carefully approach the choice of a video film for use in a children's audience.

The Ministry of Education and Science is making efforts in this direction by creating an electronic library www.eLearn.mon.bg, where a lot of educational videos can be found, but they do not cover enough of the educational material.www.ucha.se is a platform that also relies on video content as an educational resource, but requires a paid subscription, making it insufficiently accessible.
Homemade (amateur) video recordings are different in content and purpose. Modern mobile devices (phones, tablets) offer opportunities for quick and easy video capture.

Often teachers in Bulgaria use them in their pedagogical practice, for example, in study trips, when visiting sites of architectural, historical and cultural value. Because of the development of technology, the technique of filming is now cheaper, cameras are widespread and convenient, digital cameras and mobile phones have the ability to shoot, making the production of short film (video fragment) generally available.

Research reveals that students better learn through a variety of media, rather than just oral exposition. Keeping in mind that students are able to focus attention for 16-20 minutes, the use of movies can attract their attention for longer. Short films (video fragments) stimulate the development of storytelling and presentation skills in students. Teaching methods are direct and indirect. As indirect methods include research and active learning. Training with the support of video fragments can be seen as an indirect method of teaching. Within the framework of this educational method, the use of the audio-visual tools for watching and shooting short films, is carried out under the guidance of the teacher, who performs the role of a group leader. The teacher determines the topic of the film preparation project, and the students generate possible ideas for realization. Short films are effective and useful. It improves remembering and understanding, and supports creative thinking. A major disadvantage is the lack of the necessary equipment and competences in teachers and students for preparation and realization. From all that has been said so far, we can conclude that in the Bulgarian school video content has been used for a long time and follows the trends in world education. The Bulgarian teachers are willing to diversify their teaching work, but they do not always have the necessary tools and competencies to create and apply video materials as a didactic tool in training.

References:

Lazarova S., Lazarov L. Audio-visual and Information Technologies in Education. St. Cyril and Methodius", 2010.

Usage of Multimedia Visual Aids in the English Language Classroom: A Case Study at Margarita Salas Secondary School (Majadahonda) (2013)
https://www.ucm.es/data/cont/docs/119-2015-03-17-11.MariaRamirezGarcia2013.pdf -

Kabadayi L. The role of short film in education. - Procedia - Social and Behavioral Sciences

2.1.3 Slovenia

The history of the introduction of ICT in Slovenia dates back to the 1970s. Computing as an optional subject appeared in Slovenian secondary schools in 1971. With the development of computing and informatics, the subject also developed. Post is compulsory in all secondary schools under the name Computer Science and Informatics (RAI). Simultaneously with the development of the subject, various activities of the Institute of Education of the Republic of Slovenia, the Ministry of Education and Sports and the relevant faculties took place in the field of the development of the teaching of computer science and informatics and the teaching of other subjects using computers and other elements of ICT.
The teaching of computer science in secondary schools in Slovenia began in 1971 with the project Introduction of computer literacy in secondary schools. This places Slovenia among the pioneer countries in the introduction of ICT in the educational process. That year, computer specialists were taught at selected schools, and at the same time a course was held for future computer science teachers in secondary schools. In the year 1972/73, 20 participated in it, in the year 1973/74 40, and in the following school year already 65 Slovenian secondary schools. The number of students taking the computer science course rose from the initial 200 in the first, experimental year 1971/72 to 2,500 in the 1974/75 school year. In 1983, standardization was established for hardware and software in Slovenian secondary schools.

The curriculum was last changed in terms of content and methodology with the curriculum renewal in 1997/98. The PETRA project (started in 1989) started to introduce the use of computers in primary schools in the classes of Slovenian, art and technical education in the 5th grade. In the first year, 8 elementary schools from Ljubljana participated in the project (Wechtersbach, 1993, 18), and in 1994/95, 175 elementary schools were already involved in the project, and materials were also being prepared for other subjects (http://vlado .fmf.uni-lj.si/educa/wcce/ro.htm).
With the project, several innovations were introduced into schools: team teaching (there were two teachers at the same time - a computer specialist - later he was transformed into an organizer of information activities - and a teacher of the supporting subject), cooperative learning (students cooperated with each other in groups), teachers who have taught other teachers, development groups, etc.

System measures for the comprehensive introduction of the use of ICT in teaching and learning began to be implemented from 1994 onwards.

The foundation for the meaningful and effective use of modern technology in education was laid by the Computer Literacy Program (RO program), which ran from 1994 to 2000 and was extended until 2006. The purpose of the RO program was to ensure:

- hardware, communication and system software to the Slovenian VIZ.
- training of teachers and principals in the use of ICT in teaching, especially didactic software and e-materials on the Internet, mainly through seminars and applied development and research projects in this field (Slovenian educational network (SIO) with a catalog of materials and events; regular two-year research on the state and trends of ICT use in primary and secondary schools; use of artificial intelligence approaches in decision-making; development activities at faculties, etc.)

The RO program actually ensured systemic changes through systemic measures, as training sessions for educators, teachers and principals took place (at least 2 to 4 thousand participants per year), as well as equipping Slovenian secondary schools with ICT and other activities without major gaps (more or less intensive depending on the annual budgetary possibilities) from 1994 to 2006. Also, from the very beginning, the Ro program encouraged the management of kindergartens and schools to approach the planning and implementation of computerization of individual VIZ as comprehensively and systematically as possible. Since 1998, the post of computer operator - organizer of information activities has been systematized in the field of primary education (EUR 5 million per year; previously it was financed from the RO program since 1995). Since 1995, within the framework of RO, regular promotion of progress and achievements at home and abroad has also taken place, especially the high-profile annual international conference International Educational Computer Conference (MIRK).

The RO program was regularly financed from the national budget, and from 2004 co-financing of activities from the European Social Fund and the European Regional Fund began, and later the ministry, public institutions and VIZ also applied for funds from other EU programs (Lifelong learning, Erasmus+, Horizon 2020,...).
Since 1994, Slovenia is among the leading countries in the field of informatization of education, as regularly shown by international research (e.g. in 2013: first in the use of virtual learning environments; first in the preparation of school plans for informatization; first in the support of school management in the field of informatization; among the first in the field of training and support of teachers for the didactic use of ICT in lessons; among the first in providing quality e-materials for learning and teaching, etc.). Research has clearly shown that Slovenia is among the most successful in those areas that were financed from projects that we actually implemented frontally, i.e. all schools and teachers could participate.

In 2019, however, the research showed a drastic decline and pushed Slovenia even to the last place in some areas (e.g. training and support of school leaders), since activities in the field of digital education were no longer carried out comprehensively since 2015, and thus schools, principals, teachers they no longer "felt" that the effective use of ICT in teaching and learning was among Slovenia's priorities.

E-education project (2009 – 2013)

The aim of the E-education project was to comprehensively and qualitatively upgrade the existing activities in the field of computerization of education, both organizationally and content-wise. The basic condition was that all previous results and experience were the basic starting point for the leap:

- all personnel resources and potential invested in:
  - on the one hand, various stakeholders: public institutions, schools, universities, as well as external stakeholders: companies, NGOs, etc. and on the other hand, different "types" of colleagues: managers, coordinators, members of development groups, multipliers and mentors/consultants, organizers,
- teaching content (software, applications, e-materials and other aids),
- seminar programs and seminar materials and also taking into account new trends in the training of teachers, principals of ROID and other professional colleagues, such as workshops, on-site consultations and other didactic support and technical assistance to educational institutions,
- e-communities for horizontal and vertical activities, etc.

The project planned and achieved:

- Standards for e-competencies for teachers, principals (school management) and computer specialists,
- an online environment for the exchange of information between all stakeholders in the field of digital competences and teacher education,
- optimal equipment with appropriate knowledge for the use of information and communication technology,
- guidelines for developers and training providers to ensure compliance of training programs with the standards of an e-competent teacher, principal and computer scientist,
- support to teachers and schools with advice on the (meaningful, pedagogical) use of ICT
- and a matrix of computerized VIZ activities with defined tasks.

A joint e-centre was also established as a single entry point for schools and as a coordination center for the activities of all projects, as the large scale of the projects in particular required coordinated and coordinated management and guidance (Figure 1).

The tasks of the e-centre were:

- project management: coordinated planning and implementation of all activities of the individual sections of the project
- single point of entry for all VIZ and the client
- reporting, control, evaluation of the project
- joint training of all contractors and colleagues
- planning, construction, maintenance and management of the information system
- project promotion
- cooperation with other projects and all active participants in the field of computerization of education
- within the framework of the e-centre, the activities of the e-education project (E-competent teacher and E-support) were planned, approved and coordinated.

C:\Users\Uporabnik\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\ED04CA17.tmp

Figure1: Organization of the E-school project 2008 - 2013. Source: https://projekt.sio.si/e-solstvo/.

During this teacher training, over 9,000 e-materials created in the e-education project were active on the sio.si portal. Materials were searched using a search engine. Editing of materials was carried out at the primary level, where editors edited e-materials from their areas of expertise. All editors were gathered in the editorial board. The editors were invited and selected from experts in various fields, and one of the conditions was that the editors were already authors of e-materials.

The e-education project published all important data on the SIO portal, and the number of SIO users increased year by year. To a large extent, the implementation of seminars and consultations as part of the E-schooling project and the active promotion of the portal of all the collaborators of the E-schooling project contributed to this. A large number of daily current news from the field of computerization of educational institutions also contributed to the large attendance. Sio has become a single entry point to current information in the field of ICT for all pedagogical workers in Slovenian schools. As part of the e-education project, there was a strong awareness that without up-to-date information, without a systematic approach (which the e-education project certainly is) and without direct work in the field, even a single point of entry would have no perspective.

In the last months of the e-education project, the average number of daily visits per day was between 5,000 and 9,000. At its peak, there were over 11,000 daily visitors, which was more than a good result for an educational portal in 2013.
The editing of the portal (technical and content) was carried out by the E-school project and ARNES.

In the years 2006 - 2010, the Ministry published 3 public tenders for the development and introduction of e-materials (kindergartens, primary schools, gymnasiums or general secondary schools, vocational and professional schools, colleges, schools and institutions for the education of children and adolescents with special needs).

The activities in the project were primarily to develop new or upgrade existing teaching and learning approaches and for this purpose to develop new or upgrade existing e-materials and to provide e-communities for sharing experiences in their use and also to provide training, technical and didactic support to users and also promotion of results.
128 projects were implemented in three public tenders. 120 more comprehensive e-materials were created, which to a greater extent are still available under the Creative Commons (non-commercial) license. After 2010, however, e-materials were generally not updated either in terms of content or technology, although they are still in use. Among them is the material CREATING VIDEO RECORDS.

More than 2,300 teachers from 237 schools participated in the month of spreading the use of e-materials, who mainly tested and introduced the use of e-materials on the Internet and other e-materials (didactic software, internal materials of schools and teachers, encyclopedias, Wiki etc.).

At each participating school, at least three teachers or professors started using new e-materials as well as other e-content and tools on the World Wide Web, thereby raising the level of use of information and communication technology (ICT) in lessons, and reported on this at the beginning of December 2008 and also on the school website.
For this purpose, the participating school provided support to these teachers, namely the project manager and any other project collaborators, who encouraged the aforementioned 3 teachers, advised them, presented new didactic options, offered professional support and participated in the preparation and implementation of the lesson, which used new e-materials, etc. In the project, the work of colleagues in the project who provided support to teachers, lectures by authors of e-materials to teachers was co-financed.

The work of teachers in the implementation of lessons with e-materials was not specifically financed, because it falls within the scope of their regular work. However, their author's work was financed: the preparation and publication of a case study of the use of e-materials and an opinion about e-materials.

In 2011, a pilot project took place, within the framework of which recommendations for the production of e-textbooks were created (September 2011; Institute of Education of the Republic of Slovenia) entitled Starting points for the production of e-textbooks (Kreuh, Kač and Mohorčič, 2011), which should contribute to greater coordination in the preparation and approval of e-textbooks in Slovenian schools. As part of the project, it was planned to produce 7 e-textbooks as an upgrade of the e-materials, but in the end 3 e-textbooks were approved (Technology and technology 6, 7 and 8; https://eucilnica.digied.si/course/view .php?id=36).

In the e-School bag project, the following were developed for students, teachers and other interested parties:

19 e-textbooks for the 8th and 9th grade of elementary school and the 1st year of high school: for Slovenian, English as a 1st foreign language, German as a 2nd foreign language, geography, music and visual arts. The textbooks are interactive, cover the entire curriculum for an individual class, include the features of a textbook and a workbook (approved by the Professional Council of the Republic of Slovenia, freely accessible to all interested users, working on all operating systems and on all mobile and stationary devices). The development of interactive textbooks for social science subjects is based on didactic starting points and guidelines, as well as technical and organizational starting points for the preparation of interactive textbooks, which were prepared in the project E-textbooks for science subjects in elementary school.
Program for the further establishment of ICT infrastructure in education - SIO-2020 (2016 - 2020)

In 2016, Arnes started the implementation of the four-year 'Program for the further establishment of ICT infrastructure in education', abbreviated Slovenian educational network - 2020 or SIO-2020. Within the framework of the Program, the construction of wireless networks and the purchase of ICT equipment will be co-financed for educational institutions. The program was implemented through three interrelated activities:
1. construction of wireless networks,
2. purchase of new equipment (ICT),
3. development of e-services and e-content.

The construction of powerful and secure wireless networks together with the purchase of ICT equipment follows the directions and the development and results of related projects that introduce innovative teaching methods (Pedagogy 1:1) and develop e-content and e-services in the cloud for use in the classroom (E- school bag). This establishes the necessary e-infrastructure at VIZ, which represents the technological condition or appropriate environment for innovative learning practices.
Here, it is important that the equipment of VIZ is planned sustainably, as the equipment (both communication and ICT clients) needs to be maintained and updated, as well as care must be taken to replace outdated equipment.
Innovative Public Institution Project (2016 - 2018)

Within the framework of the IJZ project, 20 e-education seminars, 5 self-assessment seminars and 4 workshops were included in the offer of seminars (in the KATIS application) in the area of Ways to improve academic achievements. Didactic strategies and active lessons for acquiring knowledge in individual fields and subjects with effective integration of information and communication technology and learning according to the principles of formative monitoring and work with vulnerable groups were in the foreground.
International project MENTEP, Erasmus + (2015 – 2018)

Within the framework of the MENTEP project, the system solution for measuring teachers' pedagogical digital competences and the method of introducing such measurement and the creation of professional training for the use of ICT in 13 European countries were verified, thereby enabling teachers to evaluate and monitor their digital competences in order to improve the quality of education. Digital competences are defined as the ability to use ICT in a professional or work area with the ability to make pedagogical and didactic judgments and awareness of the effects on learning strategies in such use. The website of the MENTEP project is available at https://www.zrss.si/mentep.

As part of the MENTEP project, the iEkosistem portal was also created, which is intended to support the professional development of educators, teachers and principals in the field of pedagogical digital competences. On the portal, you can access the Self-Check tab, where you can access the POT OS web tool. After completing the self-assessment, teachers learn which are their strong and weak areas of using ICT in their teaching work. Competence areas offer different possibilities for professional growth for the area that the individual wants to improve. Various types of trainings and various digital resources from the box are prepared.

International projects ATS 2020 - Assessment of Transversal Skills (2015 - 2018) and Assessment of Transversal skills on STEM - ATS STEM (2018 - 2021), Erasmus +
Formative monitoring and evaluation of transversal skills with ICT is a project in which possible answers to the overarching questions were investigated:

- How should I formatively monitor and evaluate the development of some transversal skills of my students using various ICT tools (and the development e-portfolio)?

- How do I empower students to plan, monitor and evaluate their own progress in these skills.

The fundamental purpose of the ATS 2020 project is therefore to introduce modern approaches to the promotion of development and to the monitoring and evaluation of transversal skills, which are called differently in different contexts (e.g. European key competences, 21st century skills, etc.). One of these is digital skills, which were meaningfully integrated in the project to promote the development of skills, such as e.g. cooperation and communication, critical thinking, self-reflection and self-regulation, working with resources, creativity, learning to learn, etc. For this purpose, they used formative monitoring with the use of a development e-folio. The key research question of the ATS STEM project is to analyze the possibilities of digital monitoring and evaluation in science, technology and mathematics lessons. The project therefore places great emphasis on the development and use of effective possibilities for digital monitoring and evaluation of the development of transversal skills and competences in the field of MINT/STEM (also from the point of view of the usability of digital tools) and on recording and solving the challenges arising from this.

NA-MA POTI project (2017 - 2022)
Digital technology is sensibly included in all building blocks of natural science and mathematical literacy, especially in the 2nd building block of both literacies: the use of ICT in modeling in mathematical literacy and the use of ICT in support of experimental research work in natural science literacy.

The DT RAP ICT Authentic Problem Solving Task Team focuses on thoughtful cross-curricular digital literacy development within all literacies, with an emphasis on autonomous use of ICT for problem solving and algorithmic thinking.

CTMT project - Computational thinking and mathematical thinking: digital literacy in mathematics curricula (2019 - 2022)

The international CTMT project is looking for ways to integrate computational and mathematical thinking within the curriculum. Five Slovenian schools are involved, eight countries are participating at the international level. Through activities in project schools, models of didactic approaches will be developed, which include the development of computational thinking in the development of mathematical thinking in mathematics lessons. The purpose of the project is to formulate recommendations for curriculum design in contexts and to verify relevance in an international context. In the project, an analysis of scientific and professional sources will be carried out, on the basis of which an opinion on the relationship between computer and mathematical thinking in the educational process will be formed.

International project Education for digital citizenship (2019 - 2020), Council of Europe.

The Institute of Education of the Republic of Slovenia, in cooperation with the Council of Europe, is leading the international project Education for Digital Citizenship. The purpose of the project is to acquaint teachers with ten areas of digital education and to test approaches to the effective use of technologies based on the promotion of civic awareness, respect for human rights and democratic culture. In doing so, we guide teachers to an effective and positive attitude in the use of digital technology, active and responsible participation in various communities, lifelong learning in various educational environments, formal and informal, and the preservation of democracy and the defense of human rights. The project will build a network of 200 European schools from 20 countries for education for digital citizenship. In Slovenia, 10 primary and secondary schools participate.

Distance education

In the last three years, all publishing houses that publish textbooks and workbooks have taken a big step in the production of educational videos and other interactive materials. A teacher who chooses which textbooks he will use to teach often makes his own decision and chooses the publisher that offers more support for educational materials. The publishing houses are therefore competing with each other to see which one will offer more in this area as well.

Publishers have developed quality e-materials (video clips, interactive exercises, quizzes, audio recordings, etc.) for all areas of teaching. The use of these materials is so easy that you do not need special computer knowledge to use them. The vast majority of teachers therefore use these materials. The teacher has a rich set of tools at his disposal, which he includes in the lesson. These are short videos (up to 3 minutes) that capture the essence and can be used by the teacher as introductory motivation, enrichment, additional explanation or repetition of material. The competition between publishing houses is very high and therefore they are all trying to attract as many teachers as possible to use their material. The base of materials has increased a lot for this very reason, which is why the situation in Slovenia is at a high level.

The Internet is a ubiquitous communication network of information resources that fundamentally changes the way modern society operates with easy access to a variety of content and services. In the globalized world, it means an extremely effective means of communication for the free flow of information, which has significantly changed the communication image of the modern world, so access to the Internet and the use of its services is generally understood as a human right of the 21st century.

In Thursday's elementary school class, we use Rokus workbooks. The workbook is supplemented with video and audio support.
The video Grandma and Nika was used in the Slovenian class. It was used at the beginning of the school lesson when we discussed the difference between literary and non-literary language.

https://api.izzi.digital/preview/page/263827?
token=92500b69e8a31d5ebf08751146ad517e

Example of the use of video records in lessons

In Thursday's elementary school class, we use Rokus workbooks. The workbook is supplemented with video and audio support.

The video Grandma and Nika was used in the Slovenian class. It was used at the beginning of the school lesson when we discussed the difference between literary and non-literary language.

https://api.izzi.digital/preview/page/263827?token=92500b69e8a31d5ebf08751146ad517e

Content

It depicts the meeting of a girl Nike and her grandmother. Nika is on her way to music school and meets her grandmother, who is just returning from the market. Grandma invites her to her home, Nika promises that she will come after music school. Then she will play a game of chess with her grandfather. Nika politely says goodbye to her grandmother.

The goals we pursued in this activity:

Students

Talk about their communication experiences and polite conversation,

Watch, understand, experience, summarize and evaluate informal and formal conversation,

Compare recorded conversations and summarize the characteristics of informal and formal conversation,

Understand, use and illustrate the linguistic term interlocutor,

Raise awareness of the use of literary and non-literary language in conversation,

Recognize appropriate greetings and addresses as well as ticking and shouting in given circumstances,

☐ participate in a role-play (in an official conversation) and evaluate the conversations played out,

☐ communicate non-verbally (understand and value the visual and auditory companions of speech),

☐ empathize with new communication situations,

☐ are creative,

☐ They are cultured,

☐ use knowledge in everyday life.

Such videos, provided by the publishing house, according to which workbooks we work at school, enrich the lessons.

The students are placed in a situation that they understand better, because they see the examples first on the tape. Then they act out a similar conversation with each other. We also watch the video several times, because in it we observe e.g. polite greeting, literary - non-literary language, we determine who the interlocutor is, we observe whether there is shouting or ticking... Students practice performing in front of a group, because in the role play they forget that they are performing and are more relaxed.

After watching the video, we continue solving the exercises in the workbook.

The students really like the short videos I play during class. Rokus - Klett Publishing has strong video support for the learning material in all subjects. I notice that students remember the learning material better if they watch a video clip. The details from the recordings they mention stay in their memory much longer than if we just talk about them.

I regularly use all accessible video content that is available (otherwise for an additional payment) at work. Hardly a day goes by when we watch short videos at school. The most in the subject Natural science and technology, society, Slovenian and music.
In the 1980s, schools began to intensively integrate ICT into their equipment. The training of teachers, who until then had not yet received an adequate education at the college, began. They implemented a new subject of computer science and introduced a new position in the school, a specialist in computer support. After 2000, ICT achieved major changes with the intensive expansion of Internet access.

In the first period, Slovenia ranked high among other countries in terms of ICT availability in schools, equipment, optional subjects for learning computer science and teacher training to include computers in their lessons. Already in 2006, another international survey of the use of ICT in education, SITES, pointed to a series of problems (Law, Pelgrum, Plomp, 2008).

Schools in Slovenia were above average (compared to other countries) well equipped with computers and other devices such as digital cameras, but their use was weak. Although the computer classrooms were well equipped, it was difficult for the students to get to the lessons. The proportion of computers per student at school was low. Computers in classrooms, which were intended for teachers' use, were becoming outdated, in the rapid development of operating systems, schools could not always keep up with the latest versions of equipment. From researching ICT use practices in schools, we learned that very few innovative projects are taking place in Slovenia, and especially very few in regular classes.

Despite the then-received National e-Learning Strategy 2006-2010, which shifted the importance of ICT use from ICT learning to ICT use in learning, schools reported that they did not use ICT, or to a much lesser extent than elsewhere, to track student progress, knowledge testing and communication with parents, especially that they do not need additional training of teachers for the use of ICT in education and the integration of ICT into the work of the school.

Compared to other countries, the share of Slovenian schools that stated that they needed training is the lowest among countries.

Until 2000, Slovenia had comparable results to more developed countries in Europe, especially in the field of use in lessons (mathematics, Slovenian, geography), as research has also shown. The Ministry of Education considers the reason for the good result to be mainly due to the comprehensiveness of the project, which at the same time took care of equipping schools (hardware, local networks and the Internet), training teachers for the equipment that was in schools, and for further development and research. In recent years, the difference between the countries has decreased, as other countries (Hungary, Estonia, the Czech Republic are highlighted) have equipped schools and trained teachers with a clear vision and strategy. They were guided by the fact that information and communication technologies can significantly contribute to the modernization of lessons, where the teacher from being a provider of knowledge becomes a coordinator and guide of knowledge and directs students to the appropriate evaluation of the information they receive in different ways, explains the Ministry of Education.

The Internet is a ubiquitous communication network of information resources that fundamentally changes the way modern society operates with easy access to a variety of content and services. In the globalized world, it means an extremely effective means of communication for the free flow of information, which has significantly changed the communication image of the modern world, so access to the Internet and the use of its services is generally understood as a human right of the 21st century.

In the last five years, all publishing houses that publish textbooks and workbooks have taken a big step in the production of educational videos and other interactive materials. A teachers who chooses which textbooks they will use to teach often makes their own decision and chooses the publisher that offers more support for educational materials.

The publishing houses are therefore competing with each other to see which one will offer more in this area as well.

Publishers have developed quality e-materials (video clips, interactive exercises, quizzes, audio recordings, etc.) for all areas of teaching. The use of these materials is so easy that you do not need special computer knowledge to use them. The vast majority of teachers therefore use these materials. The teacher has a rich set of tools at his disposal, which he includes in the lesson. These are short videos (up to 3 minutes) that capture the essence and can be used by the teacher as introductory motivation, enrichment, additional explanation or repetition of material. The competition between publishing houses is very high and therefore they are all trying to attract as many teachers as possible to use their material. The base of materials has increased a lot for this very reason, which is why the situation in Slovenia is at a high level.

References:

Japelj Pavešić, B., Peršolja, M., Špegelj Razbornik, A. (2020). Zaostajanje uporabe IKT za poučevanje v slovenskih osnovnih in srednjih šolah. Pedagoški inštitut.

2.1.4 Spain

Educational videos as a didactic resource for teaching

Incidence of ICT in teaching in Spanish elementary education and high school. A brief study and some conclusions.

Introduction

The educational video is a didactic resource that for many years has been used by teachers to teach different topics, in fact, there are authors such as Bergmann and Sams who have used the video as a didactic resource to socialize the contents with their students and from this build knowledge. [1] Thanks to the scientific progress that has been developed in recent years, the human being through ICT (information and communication technologies) has been able to access all kinds of information throughout the world, it is through the computer mediated by the internet that access to information is possible; said information is found in videos, audios or texts; In addition, the use of "technologies foster participatory behaviors, and from media education it is necessary to promote them"[2]. The video has the capacity to narrate stories or transmit information through the succession of images and sounds [3], its segmentation of narration can be of short and long duration, although the short narration is the most used, the video clip and educational videos are an example of a short visual narrative and through them information is transmitted that requires a brief attention from the viewer.

Years ago, when we talked about the "new information technologies and communication" we were not aware of how the term "new" would disappear quickly from that conceptual framework. In fact, it was intended to link these technologies with the educational field justifying the almost imperative need of "connect" the school with social reality. And video was a significant component of this new vision of technology administered in the classrooms.

Videos have become a popular tool in education in the past decades, providing an engaging and interactive way to learn. In Spanish elementary education and high school, videos are widely used as a learning tool to support the teaching of different subjects. This article of the ....And Action! Consortium will explore the use of videos as a learning tool in Spanish elementary education and high school. This innovative tendency has its beginnings in the last decades of the 20th century.

The use of educational films and videos did not become widespread in Spain until the 1970s and 1980s, with the introduction of the VHS format. Prior to this, educational materials were typically delivered through traditional means such as textbooks, lectures, and blackboard instruction.

That being said, there were some early attempts to use film and video in education during the 1950s and 1960s, particularly in higher education. According to some sources, universities such as the University of Salamanca and the University of Valencia began using film as a teaching tool in the late 1950s, primarily for subjects such as art, history, and literature.

However, it is important to note that these early uses of video technology were limited and not widely adopted throughout the educational system. The lack of access to video technology, coupled with a conservative educational system that was slow to adopt new teaching methods, meant that video did not become a significant tool for education in Spain until much later.

First, a brief note to classify videos as educational tools. According to M. Cebrián (1987) [4], videos can be categorized into four different types: curricular, which are designed specifically for a particular subject's curriculum; cultural dissemination, which aim to present certain cultural aspects to a wider audience; scientific-technical, which provide content related to the advancement of science and technology or the explanation of physical, chemical or biological phenomena; and educational videos, which are not specifically made for teaching, but can be used as didactic resources with a particular educational intent.

The period between 1970 and 1989 was a period of significant technological advancement in Spain, and the use of video as a teaching tool became more widespread during this time.
One study that provides insights into the use of video in education in Spain during this period is “ITC challenges for the change in education” [5]. This study, published in the Journal of Educational Media, examined the use of video technology in Spanish schools during the past decades.

According to the study, the use of video in education in Spain during the 1980s was driven by several factors, including the increasing availability of video technology, a growing interest in audiovisual media, and a desire to modernize the educational system. The study found that video was used in a variety of educational contexts, including in-class instruction, teacher training, and distance education.

Another study that provides insights into the use of video in education in Spain during this period is. "The Use of Digital Tools in the English Classroom in Spain" by Juan Rubio Antonio Danie and García Conesa Isabel María [6]. This study, published in the Journal of Educational Technology & Society, examined the use of video and other audiovisual media in foreign language instruction in Spanish schools during the 1970s and 1980s.

The use of audiovisual media in foreign language instruction in Spain was not widespread, although there was a growing recognition of the potential benefits of these technologies for language learning. According to a study, video was mainly used as a complementary tool to textbooks and other teaching resources in foreign language instruction. Teachers showed a positive attitude towards the incorporation of video in the classroom, as it helped to promote engagement and motivation among students.

Overall, these studies suggest that the use of video in education in Spain increased significantly during the 1970s and 1980s, driven by a combination of technological advancements, cultural factors, and a desire to modernize the educational system.

The new millennium meant progress in this area. Between the last decade of the XX century and the 2000s there was a period of significant growth in technology and digital media, and the use of video as a teaching tool continued to evolve during this time.
One study that provides insights into the use of video in education in Spain during this period is "ICT in collaborative learning in the classrooms of Primary and Secondary Education" by García-Valcárcel-Muñoz-Repiso, Ana, Basilotta-Gómez-Pablos, Verónica and López-García, Camino [7].

This study, published in Comunicar, an Iberoamerican scientific divulgation magazine, examined the use of video production as a pedagogical tool in teacher education programs in Spain during the 1990s and 2000s. Video production was used as a way to enhance students' engagement, motivation, and critical thinking skills, and to promote reflection and self-assessment. The study found that video production was most commonly used in teacher education programs as a way to develop practical skills and to provide opportunities for collaborative learning. Defining that "digital technologies offer new opportunities for learning in an increasingly connected society, in which learning to work with others and collaborate has become an extremely important skill."

Another study that gives a new perspective into the use of video in education in Spain during this period is "Digital competence and construction of personal learning environments as challenges of higher education" by Cristóbal Suárez-Guerrero and Francisco Luis Gutiérrez-Martín [8].

This study, published in the booklet “Challenges of the education in times of change” by the University of Valencia (2016), examined the use of online video lectures in higher education in Spain during the 2000s.

According to the study, “online video lectures were used primarily as a supplement to traditional classroom instruction, and were seen as a way to increase flexibility and access to course materials. The study found that students who used online video lectures tended to have higher levels of engagement and motivation, and that the use of video lectures was generally positively received by both students and instructors.”

Furthermore, the use of video in education in Spain continued to evolve and expand, as educators and institutions increasingly recognized the potential of video as a pedagogical tool. This period was characterized by significant technological advancements, which provided new opportunities for the creation and distribution of video content. In addition, educators began to develop a greater understanding of how video could be used to enhance students' learning experiences, by promoting engagement, motivation, and critical thinking skills, and providing opportunities for reflection and self-assessment.

As a result, video became an increasingly popular and valuable resource in the Spanish education system during this time. Teachers and instructors began to use video production as a pedagogical tool in a variety of settings, including teacher education programs, higher education courses, and K-12 classrooms. Video production was seen as a way to enhance students' practical skills, promote collaborative learning, and increase engagement and motivation.

At the same time, the use of online video lectures began to emerge as a popular supplement to traditional classroom instruction, providing students with greater flexibility and access to course materials. These developments were driven by a growing recognition of the potential of video as a pedagogical tool, and a desire to harness the power of technology to enhance learning outcomes. Overall, the use of video in education in Spain during the 1990s and 2000s represents a significant period of growth and innovation in the integration of technology and digital media into the education system.

A new perspective: the use of videos in the classroom has many benefits for both teachers and students.

One of the main advantages of using videos is that they provide a visual representation of concepts, making them easier to understand. The best example of these videos can be a “how to” video to explain a concept.
Videos can also be used to create a more engaging and interactive classroom experience, helping to keep students interested and motivated. Some playful resources are the examples of the video riddles, video stories and animations that can be seen in the elementary schools in Spain.

In addition, videos can be used to supplement classroom lectures and provide additional learning resources for students. This is particularly useful in subjects such as science and social studies, where visual aids can help to reinforce key concepts.

Using videos in Spanish elementary education: In Spanish elementary education, videos are often used to teach basic vocabulary and grammar. For example, videos can be used to introduce new vocabulary related to food, animals, and colors. Videos can also be used to help students understand basic grammar concepts, such as verb conjugation.

Another way videos are used in elementary education is to teach cultural aspects of the Spanish-speaking world. Videos can be used to introduce students to different traditions, holidays, and celebrations. They can also be used to provide a glimpse into the daily lives of people in other Spanish-speaking countries.

In Spanish high school, videos are used to teach more advanced language skills, such as writing, speaking, and listening. Videos can be used to provide real-life examples of how to use advanced grammar concepts and to help students practice their speaking and listening skills.

Videos are also used to teach more complex cultural aspects of the Spanish-speaking world. High school students may be exposed to a wider variety of cultural topics, such as art, music, literature, and history. Videos can provide an engaging and interactive way for students to learn about these topics. With the introduction of the smartphones and wireless technology, students can use their phones as a tool to expand the learning field.

In the past decades, and nowadays, audiovisual resources can be presented as an effective engagement tool to provide real examples to high school students that are facing new challenges in their everyday life. It can be assured that “video provides a window into the world and allows learners to experience places, people, and ideas that they may not have the opportunity to encounter in real life” [9].

Challenges of using videos as a learning tool

According to a 2020 study by the Spanish Ministry of Education and Vocational Training [10], 100% of primary schools and 99% of secondary schools in Spain have internet access. In the same study, it was found that 80% of primary schools and 96% of secondary schools in Spain have a broadband internet connection. A 2020 report by the Spanish Ministry of Education and Vocational Training found that 85% of teachers in Spain use technology in their classrooms [11].

While the use of videos as a learning tool has many benefits, there are also some challenges that need to be addressed. One of the main challenges is finding high-quality videos that are appropriate for the students’ level. Teachers need to spend time researching and selecting videos that are relevant to their curriculum and meet their students' learning needs. One of the most popular platforms to conduct research and use videos is the North American video hosting, sharing, and services platform provider Vimeo.

In addition to the technical and logistical challenges, incorporating videos in the classroom requires careful consideration of how they can best support student learning. While videos can be a valuable tool for enhancing learning outcomes, it is important for teachers to provide clear guidance and structure to ensure that students are using videos effectively and efficiently.
To effectively incorporate videos into the classroom, teachers should carefully select videos that align with the learning objectives and ensure that they are age-appropriate and culturally relevant. Once videos have been selected, teachers should provide clear instructions and expectations for students before they watch the video, such as identifying key concepts or taking notes.

During video-based activities, teachers should actively monitor students to ensure they are engaged and focused on the learning objectives. This can be achieved by asking students to complete specific tasks related to the video content, such as answering comprehension questions or participating in a group discussion.

Additionally, teachers should provide opportunities for students to reflect on and apply what they have learned from the video, such as through written reflections or classroom discussions. With careful planning and implementation, videos can be a powerful tool for enhancing student learning and engagement in the Spanish classroom.

Conclusions

Videos are a valuable learning tool in Spanish elementary education and high school, providing an engaging and interactive way to learn that can supplement classroom lectures and provide additional learning resources for students. In fact, it is noted that video content can help create an immersive learning experience that allows learners to gain a deeper understanding of a topic and engage with the material in a more interactive way.

Moreover, the European Commission emphasizes the importance of incorporating technology and digital media into the classroom, stating that "videos can create an immersive learning experience that allows students to gain a deeper understanding of a topic and engage with the material in a more interactive way."[12] Video is one such technology that has the potential to enhance student engagement and learning outcomes.

It is noted that the use of video in education aligns with the broader goals of the European Union's Digital Single Market initiative (2015), which seeks to promote the integration of digital technologies across various sectors, including education. Without any doubt, digital skills are essential for the future workforce, and digital technologies can play an important role in promoting inclusive and effective education.

The European Commission recognizes the value of video as a learning tool in Spanish education and encourages the continued integration of digital technologies in the classroom to enhance learning outcomes and promote digital literacy among students.
In addition to their potential as a primary teaching tool, videos can also be a valuable supplement to traditional instruction in Spanish education. Research has shown that using videos in combination with other teaching methods can improve student engagement and retention of material, particularly for visual learners. As such, educational experts often recommend that teachers incorporate videos into their lesson plans in a thoughtful and intentional way.

However, it's important to note that not all videos are created equal in terms of their educational value. In order to be effective, videos should be carefully selected to align with the learning objectives of a particular lesson or unit. This requires that teachers evaluate the content of videos for accuracy, relevance, and appropriateness to the target audience. They should also take into account factors such as video length and production quality, as well as any potential biases or cultural differences that may impact students' ability to understand and engage with the material.

Moreover, the European Commission emphasizes the importance of providing guidance and support for students during video-based activities to ensure that they are effective learning experiences. This may involve setting clear learning objectives and expectations for students, providing discussion questions or other prompts to encourage critical thinking and reflection, and monitoring student progress and engagement to identify areas for improvement.

Overall, while videos can be a valuable addition to the classroom, their educational value depends on the thoughtful and intentional use by educators, who must carefully evaluate video content and provide appropriate guidance and support to students during video-based activities. Some ...And Action! Recommendations facing present challenges:
The material presented is coherent with the curricular content.
Develop questions that generate critical thinking through the comparison and contrasting of realities.
Close the presentation with conclusive opinions.
Promote opinion on the aesthetic characteristics of the material presented.
Generate attitudes of creativity by assuming the material presented as a possibility of language.
While videos can be an effective teaching tool in Spanish education, there are also potential challenges that teachers need to be aware of when incorporating them into their lesson plans. It's important to use videos in a way that aligns with the learning objectives of a particular lesson or unit and supports the overall goals of the curriculum.

With the right guidance and structure, videos can enhance learning outcomes and engage students in meaningful ways. In fact, further research will be conducted to explore the use of video as a pedagogical tool in Spanish teacher education programs.

Reference:
[1]. Bergmann, Santiago, Raúl, Aprender al revés. España: PAIDÓS Educación, 2018.
[2]. Ferrer, Joan, Las pantallas y el cerebro emocional, Barcelona: Gedisa, 2014.
3]. Fandos Igado, Manuel, El video y su papel didáctico en Educación Primaria, Comunicar Vol. 2, 1994.
[4]. Cebrián, Miguel, ¿Qué es el video educativo?, Comunicar, 1987.
[5] . Carneiro, Roberto; Toscano, Juan Carlos and Díaz Tamara, ITC challenges for the change in education, 2021.
[6] Juan Rubio, Antonio Daniel and García Conesa, Isabel María, The use of Digital Tools in the classroom in Spain, Journal of Language and Linguistic Studies, 2022.
[7] García Valcárcel Muñoz Repiso, Ana; Basilotta Gómez Pablos, Verónica and López García, Camino, ICT in collaborative learning in the classrooms of Primary and Secondary Education, Comunicar, 2014.
[8] Suarez Guerrero, Cristóbal and Gutiérrez-Martín Francisco Luis, Digital competence and construction of personal learning environments as challenges of higher education, in "Challegences of the education in times of change", University of Valencia, 2016.
[9] Hughes, Julie E. and Kibbe, Sharon A., The Use of Video as a Tool for Learning and Teaching in Higher Education: A Case Study, 2015.
[10] Ministry of Education and Vocational Training of Spain, The numbers of the Education in Spain (2019-2020), https://www.educacionyfp.gob.es/en/servicios-al-ciudadano/estadisticas/indicadores/cifras-educacion-espana/2019-2020.html
[11] Ibid.
[12] European Commission, Opening up Education: Innovative Teaching and Learning for All Through Technologies and Open Educational Resources, in Digital Education Action Plan (2021-2027).

2.1.5 Serbia

Serbia is one of the countries that responded to the preventive KOVID-19 "lockdown", and therefore the ban on gatherings, by effectively transferring the entire education system to the Internet. This impressive adjustment to "distance" teaching included the broadcasting of classes on the Public (television) service (RTS) program, the use of Internet platforms, IT tools, programs and solutions. Anamarija Vičekk, State Secretary in the Ministry of Education, points out that new technologies produce new challenges that go beyond the issue of continuity of teaching: "For those families with limited income, the need to acquire computers so that children could participate in lessons via the Internet meant even greater difficulties. That is why the support we had from our international development partners in the procurement of the necessary equipment is of great importance, especially in rural and less developed parts of the country".

Françoise Jacob, Permanent Coordinator of the UN in Serbia, believes that the achievement of the fourth Sustainable Development Goal (SDG4), i.e. the construction of inclusive and fair, high-quality education by 2030, will require teamwork: Almost ¾ of the participants from the academic ranks in the survey conducted on this occasion believe that the pandemic has caused significant losses in knowledge. 90% of civil society organizations and all eight parents' associations that participated in the research agree with this assessment. However, the true extent of the loss in knowledge has yet to be discovered. It is necessary to complete at least one educational cycle of four to eight years in order to show the consequences of any significant change in the educational system in the educational results of students.

The students agree that participating in online classes was a problem for them due to the lack of contact with other students and the impossibility of learning in groups. Now everyone recognizes the importance of learning together, that is, learning in a team. Even in the distance learning environment, there is room for organizing work in small groups, but this requires raising the capacity of teachers, including IT skills - which was recognized as an additional priority in the consultations. Given that video recording is one of the most obvious teaching tools, but also an indispensable medium in information and communication technology, it is logical to look at it from two aspects: didactic and technical-technological. In this sense, the video lesson is described as a method for presenting teaching content, but it also describes objectively important facts about video as a medium in the field of digitization, such as: the structure of digital video, types of digital video files (files) and video standards.

Also, we deal with the classification of video software, then the possibilities of video transmission over the Internet, as well as the aspects of using ICT, and therefore video lessons.

Video lessons

If we look at the material and technical side of teaching, in the teaching process it is best to use teaching aids in combination, because their diversity engages all the senses and ensures the best effects when learning the teaching content.

According to Krulj, lessons presented with audio videos can have a learning effect of 50 to 70%, which can be considered a good effect and a sufficient reason for using video lessons in teaching. In order to realize the didactic principle of obviousness and to be in accordance with the cognitive VAK theory3, numerous means are used in the teaching process that enable visualization. Also, these resources are used in order to increase concentration and motivation for work, which are of crucial importance for improving the learning process.

Unique presentation possibilities that enable visualization offer the possibility of a better understanding of teaching content and more effective learning compared to the situation when learning is based only on the application of printed materials (Bjekić, 2009).

When organizing classes, one must take into account the fact that today's students grow with high-tech devices and that the use of these devices is inevitable, as well as that one must always keep up with their development. In addition to being very effective in acquiring knowledge, digital video formats are used in teaching to emphasize the importance of an innovative approach. And innovation directly affects student motivation (Vučić, 1996). The development of ICT has led to numerous innovations in the teaching and learning process. In this sense, websites, electronic learning and the use of multimedia in teaching, which have enabled information to be transmitted to students in various forms and formats, are certainly of great importance.

If in the process of acquiring knowledge, the impact on all senses is seen as a prerequisite for good learning, then the advantages of multimedia presented content are very great (LINKgroup, 2012). Some websites can be said to be well-known. Video lessons of various contents can be found on them. Academic Earth [12], Free Video Lectures [13], YouTube Edu [14] are the most famous websites with free video lectures. The lessons are classified into certain categories, so that the search and selection of the desired lesson is very simple.

Also, many universities publish their lectures in this way and thus make them available to the general public. We will mention: Stanford University's YouTube Channel [15], UCLA "BruinCast" [16], and MIT OpenCourseWare [17].

Aspects of use of ICT

In a series of research conducted and conducted by the company CISCO5 [18], the basic aspects of using ICT in education were explained. The obtained results are classified into eight basic categories. Basic level - ICT contributes to the quality of teaching foreign languages and humanities (e.g. history and geography) in the sense that students have the opportunity to 'move' out of the classroom (battle simulations, watching the reaction to certain phrases of foreign languages in communication, facial expression, natural beauty, national parks...).

Advanced level - In the study of natural sciences (mathematics, physics, astronomy, biology...) the use of multimedia enables the understanding of problems at a conceptual level, especially in the relationship between theoretical postulates and practical application. Enrichment of teaching - The application of video materials allows students to 'travel' to distant places outside the walls of the classroom without leaving the school or the place where the teaching takes place. Accelerating the learning process - Streaming in combination with other methods of communication is one of several ways to ensure that students attend classes at the level they need, regardless of whether they are at that level. This is especially true for gifted students. All lectures become available to the population in areas far from the headquarters of the educational institution, to students with disabilities or to those who decide to continue their education in later years.

Media exchange tools

Media sharing tools allow searching, commenting and organizing photos (Flickr), but also have the ability to create, publish, view, organize and comment on video material (YouTube, Google video, etc.), as well as podcasting, which is related to the creation and publication audio content on the Web (Odeo.) [37][43].

In class, it is possible to use them directly if the school has an Internet connection in the classroom, but also as pre-prepared and recorded material that is only presented to the students on the school computer and with the help of a projector and video beam, and the task of the teacher is to search and process the content online or just refine and adapt them to the teaching unit for which he uses them, record them and present them in class [8].

Creating materials is simplified to the extent that any teacher who has a camera or video camera can take their own photos or video and publish them online. It is enough for him to take a picture of the objects he needs for the teaching unit he is preparing, or take a video that he will later comment on with the students in class. For the purposes of one lesson, this is a comfortable and simple way to approach the children and present the content of the subject in an obvious way.

Using short videos from YouTube is much more comfortable and easier to work with than cutting parts of the film that correspond to the teaching unit, and this, again, is connected with the use of programs that can extract from the film the parts needed for one lesson, because the whole film is, too long to work within one teaching unit.

3. Methodology

3.1 Research problem

In the last decade and a half, intensive changes and reforms have been taking place in our educational system, more specifically within the framework of primary and secondary education, which result in continuous changes in curricula and programs (conceptual and content aspects), while the tendencies to innovate the curriculum process become more and more visible. The changes are based on the new knowledge about the development of quality education, on the world and European trends for education based on competences, on the digitization of education, as well as on all our previous experiences and aspirations to improve the quality of teaching and learning in our schools, which should become a place for learning and development of motivated students ready to acquire the expected competencies.

In terms of competences, in 2004 a document on Key European Competences was prepared by the European Commission, which are essentially based on the needs of a society that has knowledge as its basis, which must not remain one and a unique component that is acquired in education. Therefore, in addition to learning, competencies emphasize developing skills and attitudes, that is, values among students. (Key Competences for Lifelong learning, 2006). So, the competencies have these three extremely important components that should be developed through the educational process in compulsory schooling.

Consequently, investing in basic skills is becoming increasingly important and is required of any quality education. In particular, new ways of learning are becoming more and more unconventional and above all digital, given the great impact that digital technology has today in education, as a result of numerous more flexible learning environments. Therefore, memorizing facts and information can sometimes have meaning, but it is not at all enough for a person's progress and success. On the contrary, skills such as: problem solving learning, critical thinking, ability to cooperate, self-control, etc. are skills that are very essential in a rapidly changing society. Those skills can generate new ideas, new theories, new products and of course – knowledge.

As a result of the rapid and daily changes in society and the economy, giving a real meaning to the future and the need of future generations in the digital age, in May 2018, the European Commission recommended a review and revision upgrading the Key European Competences.

The innovative set of competencies in 2018 needed for personal development, health promotion, employability and social inclusion is being formed not only for social and economic development, but also due to various initiatives that Europe has been undertaking in the last decade. Special attention is paid to language learning, to the promotion of digital and entrepreneurial competences, to the importance of common values in the functioning of our society, as well as to the motivation of young people. (Council Recommendation on Key Competences for Lifelong education 2017).

All reforms and changes in education in a special way affect the teacher, who was, is and will be the pivot of the modern educational process, the number one factor on which the successful implementation of teaching depends, despite the increasing application of modern teaching and audio- visual aids. (Popova-Koskarova, 1997:185). Not by chance, the great German pedagogue Disterweg emphasized that "the school is worth as much as the teacher" (Disterweg, quoted according to L. Gogoska: 1994:25). For those reasons, it can be emphasized that the continuous professional development of teachers (openness to trainings that will contribute to a dynamic and creative teaching process) is a very significant, both social and personal need.

We are aware that nowadays students receive a range of information from a very young age outside of teaching, and with the raising of the general, material and cultural standard of parents and with the development of mass communication tools, then home electronic microcomputers, videos, etc. many sources of information become available to them, sometimes of the highest quality. On the other hand, it is quite natural for students to turn to teachers for various explanations, explanations or broader insights related to the specific subject or outside of it, for example, from everyday life. Their need will be met by those teachers who are not only well versed in their profession, but are distinguished by a wider general culture.
Therefore, we will once again emphasize that the nature of the teaching profession is such that it requires the teacher to learn permanently, to follow the achievements in his profession and to improve systematically in it.

According to the words of Brajsa, "the teacher is the software in the school. And the most valuable hardware is worthless if there is no software that starts, moves, maintains and develops it" (Brajsa, 1995: 10). That is why it is not by chance that it is said that the secret of a successful school lies in the active brain of both the teacher and the student. That's why the essential question: how to increase the teacher's creativity and willingness to adopt and apply innovations, so that at the same time the students' motivation to learn, which unfortunately is very low nowadays in our schools, can also increase.

Every day we witness outbursts of dissatisfaction on the part of students from the monotonous teaching process that does not contribute to the acquisition of functional (applicable) knowledge.

For those reasons, the willingness of teachers to use a variety of audio-visual materials, but also to create them themselves (ex. short videos) that can be successfully used for educational purposes in the overall educational process becomes imperative for increasing the quality, that is its effectiveness and efficiency. Educators agree with the fact that teaching in which audio-visual means are used (and nowadays digital, such as video content) brings freshness and liveliness and makes the educational process much more interesting, but at the same time more efficient, because of the great possibilities that film has as a teaching tool.

The application of video content in teaching can be successful in all levels of education, it is suitable for the younger school age, but also for the older school population. Among its advantages, we can single out the following:

- Video contents in teaching bring freshness and break the monotony in educational work.

- The skill to notice reactions, processes, events, incidents, human behaviors, etc. increases.

- The knowledge acquired in teaching in which video content is applied is much clearer, more understandable and can be more easily applied in practical life.

So, the teaching in which video content is applied as a teaching tool has a much greater value and encourages the creativity of students, and mastering the teaching content is much easier, more dynamic and with greater durability of knowledge, but also with a greater possibility of their applicability.

Video contents can be successfully used in all teaching subjects, and are especially suitable for teaching: foreign language, history, native language, but also in natural sciences (biology, geography), and they are also significant and can be applied in the arts subjects. A large part of video content for educational purposes can be found on YouTube, however, there are also educational content for which no suitable video clips can be found. Therefore, it would be best if teachers could train themselves to create a video of a few minutes, with content from the curriculum in appropriate subjects, which would then be presented to the students.

It is the best way to develop creativity among the teaching staff, and when there is a creative teacher, there will be creative students who will also be encouraged to take part in the creation of video content. This is the essence of our project "...and Action", which has the ultimate goal: training teachers to create video content for educational purposes, in order to make teaching more interesting, creative, innovative, dynamic and, most importantly, appropriate to acquire functional (applicable) knowledge.

To motivate teachers to develop their creativity and to get out of the traditional framework of teaching activity and to motivate students to achieve greater results.

However, in the creation of video content, it is necessary to observe pedagogical criteria and principles:

- Compliance with the age and abilities of the students.

- Compliance with the curriculum and the thematic contents arising from it.

- The contents to encourage intellectual activities from a higher level of Bloom's taxonomy (both from the cognitive and affective areas) - application of learning, analysis, synthesis, evaluation, and not just memorizing facts and data or passively perceiving information.

- The content should contribute to building attitudes and developing values among students for sustainable development.

- To observe the tasks of moral education and not encourage stereotypes, prejudices, etc. differences in terms of gender, race, political affiliation, etc..

In the context of the pedagogical criteria presented above, it is necessary that the content that will be the subject of video creation should be carefully selected by a team of teachers and pedagogues.

3.2 Subject of research

The subject of our research is the training of teaching staff to create video content for educational purposes.

3.3 Purpose and tasks of research (general and special)

The general goal of the research is to examine the need of schools, that is, of teachers for the creation and application of video content for teaching purposes and their capacity for development in that context.

The special (specific) goal is to train 16 teachers (per partner country) from 4 schools (primary and secondary) to create and apply video content for teaching purposes:
From the goal set in this way, the following tasks of the research arise:

- To examine the opinions of teachers as to how ready they are (have the desire) to participate in training in the creation of video content for teaching purposes, i.e. to acquire digital competencies.

- To examine the views and opinions of teachers regarding the importance of using video content within the teaching process: in terms of student motivation, dynamism of teaching, achieving better results, etc.

- To examine the opinions of teachers if they have had experience in creating video content.

- To investigate teachers' opinions on how much knowledge they have of some tools for creating video content.

- To examine the teachers' opinions about the most effective way of integrating video content into the programs by separate event subjects

3.4 Sample of the survey

The sample will consist of 100 teachers from primary and secondary schools from all the partner countries, who will be randomly selected.
A preliminary survey of 15-20 teachers is planned to check the questionnaire.

3.5 Research methods, techniques and instruments

The choice of research methods, techniques and instruments depend on the nature of the subject, that is, on its essence and character. Given that our research has a theoretical and empirical character, we consider the following research methods to be the most appropriate: - theoretical analysis method - descriptive method.

With the method of theoretical analysis and the descriptive method, we study the theoretical basis of the overall research. In fact, the mentioned methods will be applied within the theoretical part of the research, where appropriate sources that are in the context of our research subject will be covered and analyzed.

From the research techniques, we consider the survey technique as the most appropriate for our research, and for those reasons we decide on the appropriate research instrument that will be applied, which is a survey sheet (questionnaire) with closed-ended questions with which we will collect opinions and attitudes of teachers according to the research problem. The questionnaire will contain 20-30 questions, of which the first 4-5 are general and refer to: the school where they work: primary or secondary, years of work experience, age, etc. as independent variables, which we will then pass through the answers of the teachers.

We opt for an online survey via Google form.

Standard statistical package SPSS (Statistic package for Social Sciences) will be used in the statistical processing.

According to the standard research methodology, after the data are processed, their analysis and interpretation follows.

4. Survey

Dear teachers/professors,
We kindly ask you to answer the following questions honestly. The survey is completely anonymous and your answers will be used only for the needs of the research for the Erasmus+ project, which is supported by the Cinematheque of North Macedonia.

The survey will not take you more than 5-6 minutes.

1. Gender:

A) Male
B) Female

2. School where you work:

A) Elementary school
B) High school

3. The school you work is in:

A) Urban environment
B) Suburban environment
C) Rural environment

4. If you are in primary school, answer whether you are in:

A) Elementary education
B) Subject teaching

5. If you are in secondary education, answer whether you teach:

A) General education subjects
B) Vocational subjects

6. Education:

A) Higher education/ Bachelor's degree
C) Master of Science
D) Doctor of Sciences

7. Years of work experience

A) Up to 10 years.
B) Up to 20 years.
C) Up to 30 years.
D) Over 30 years.

8. Age:

A) Less than 30
B) From 31-40.
C) From 41-50.
D) Over 50 years old.

9. How proficient are teachers in creating/editing video content?

A) Very proficient
B) Moderately proficient
C) Slightly proficient
D) Not at all proficient
(Circle only 1 answer)

10. Have you ever thought about the possibility of creating a video for teaching purposes?

A) Always
B) Very often
C) Sometimes
D) Never

11. How important is it for every teacher/professor to have the skills to create videos for teaching purposes?

A) Very important
B) Moderately important
C) Slightly important
D) Not at all important

2. The main purpose of creating/using video content in teaching?

A) To improve students' motivation in teaching

B) To improve learning outcomes

C) To obtain applicable knowledge

D) To communicate with parents and the community

E) All of the above

(You can circle more than 1 answer)

13. Have you ever attended training to improve your skills in creating instructional videos?

A) Yes, through training from EDB (Educational Development Bureau)

B) Trainings and courses organized by other institutions

C) Dissemination by colleagues who know the process

D) I train myself through YouTube

E) None of the above

(Circle only 1 answer)

14. Do you have a desire to participate in training on creating videos for teaching purposes?

A) Yes

B) No

C) Maybe

15. What is the best way to encourage teachers/professors to use much more video content in teaching?

A) Through additional motivation (courses, additional trainings)

B) By providing technical support

C) Through building a culture for creating video content within schools

D) Creation of amateur film clubs in schools

(Circle only 1 answer)

16. What ethical issues should you consider when creating and sharing video content with students?

A) Copyright
B) Privacy
C) Data protection
D) Protection against discrimination
E) Inclusion
(Circle only 1 answer)

17. What is the most effective way to embed video content into various teaching subjects?

A) As a supplement to traditional school methods that include classroom lectures
B) As a subject of evaluation
C) As a way of bringing greater visualization into teaching
D) A way to more efficiently adopt the contents
(You can circle more than 1 answer)

18. How much impact, will the creation and use of video content have on the quality of teaching?

A) Very positive impact
B) Moderately positive impact
C) Slightly positive impact
D) No impact

19. How would you motivate students to create their own video for educational purposes?

A) By providing equipment and software
B) By offering support and guidance
C) By inserting video projects into teaching and homework
D) All of the above
(Circle only 1 answer)

20. What do you need to master to create good educational video content?

A) Script writing
B) Camera work
C) Editing of the video content
D) Theory
E) All of the above
(Circle only 1 answer)

21. Do you think that video contents should be brought closer to students with special needs by using subtitles, sign language or audio comments?

A) Yes
B) No

22. What role can the creation of video content have in the relations between teaching staff, students and families?

A) As a means of building trust and rapport
B) As a way of promoting shared values and goals
C) As a means of celebrating diversity and individuality
D) All of the above
(Circle only 1 answer)

23. What is the most effective way to promote educational video content created by teaching staff?

A) Social media
B) School websites
C) During school events and meetings
D) Combination of the above
(Circle only 1 answer)

24. Did you record classes and video materials during the pandemic?

A) Yes
B) No

25. If you recorded lessons or video materials, on which platforms did you publish them?

A) YouTube

B) eTwinning

C) National platforms

D) Other

Thank you!

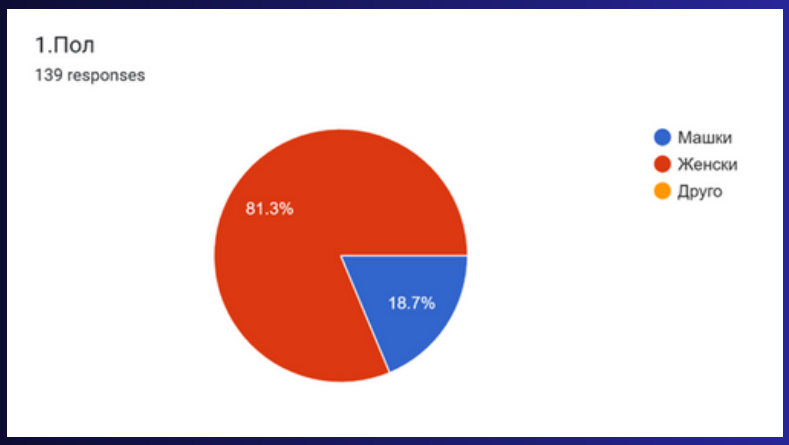
5. Analysis and interpretation of research results

A brief explanation of how to analyze and interpret the research results:
Analysis, the percentage and the number of respondents who answered the question are stated, and the interpretation follows as a final conclusion from the summarized answers.

Analysis:
According to the obtained data shown graphically, more than half of the respondents, that is, 57.6% or 80 respondents, possess an intermediate level of skill in creating video content for educational purposes. 23.7% or 32 respondents possess a high level of skill. 15.8% (22) respondents stated that they have a low level of skill, and only 3% stated that they have no experience in creating video content.

Interpretation:
If we take into account the percentage of teachers who have medium, low and no experience, which in our research is 42.5%, we can conclude that teachers still need training to achieve appropriate competencies for producing quality video content.

Clarification:
This is just an example of what analysis means and what interpretation means. Otherwise, you should not write the word analysis or the word interpretation for each question.



According to the graphic display, 139 teachers participated in our research, of which 113 or 81.3% were female and 26 or 18.7% were male. In the Republic of Macedonia, the female gender dominates the teaching profession, so that tendency is also reflected in our research.

Clarification:
For the general questions (1-8) interpretation is not necessary. Only an analysis of the answers is sufficient.

5.1 Survey Results Analyses

5.1.1 North Macedonia

Based on the received and processed (analyzed) data from the questionnaire, we can state the following conclusions, which we obtained from the empirical research.

1. The general finding (conclusion) is that teachers in the Republic of North Macedonia need training for creating video materials for the needs of teaching, with the aim of updating it, greater activity and dynamism of the teaching process. Namely, teachers need the ability to create their own videos that they will use for teaching purposes, which implies the need for appropriate and organized training, in order to be successful in that skill. In addition to this conclusion is the fact that a good number of the surveyed teachers thought about the possibility of creating their own video (but due to lack of knowledge they may never have done it), which gives us the right to conclude that they need to be trained to create video clips.

2. The use of video content will greatly increase the motivation of students (which, unfortunately, with the dominant passive teaching is at an extremely low level), and at the same time, the results of learning will improve, which would result in the acquisition of more permanent, and above all, applicable knowledge that can be used functionally. The use of video content will increase the interest of students in the educational process, and it will be possible to influence the cognitive and conative processes of the person, that is also a requirement for quality teaching.

3. We found that the teachers agree that the sharing of video content should be done by respecting ethical determinations and norms without violating one's integrity, without encouraging stereotypes and prejudices, intolerance and hatred, and by promoting diversity as a value. So, the code of ethics in the creation of video content should be at a high level and always in the foreground.

4. The possibility of students being encouraged to create their own videos is not excluded, and for that, prerequisites are needed such as: technical equipment, appropriate software and help, and of course encouragement from teachers and classmates.

5. In terms of what difficulties, they have to overcome when creating their own video, teachers believe that they should master: writing a script (although the possibility of using contents from textbooks or manuals is not excluded), then working with a camera, editing, and of course mastering the appropriate theory as a prerequisite for practical activities.

6. We have found that teachers are of the opinion that video content should be made accessible to children with special needs, but our recommendation is to work on this problem more and more systematically, because many teachers are faced with not knowing how to do it, because they do not have enough competences in this area – working with children with certain disabilities. Not by chance, seminars on inclusiveness are one of the most requested in the professional development of teaching staff in our country. However, very little or not at all has been thought about this issue - bringing video content closer to children with disabilities through subtitles, sign language and preparation of auditory materials for children who have a disability in the field of special pedagogy: impaired hearing, low vision and blindness , intellectual or speech disability, etc.

7. By creating your own video materials and using them in the educational process, you can encourage the building of relationships and bonds of trust between teachers, students and families and promote universal values: humanity, solidarity, mutual respect, tolerance and fig.

8. The teachers believe that the promotion of the creation of video content can take place through the school's website, which should be constantly maintained and upgraded, then through school events such as performances and patron holiday, Ecology Day, etc., as well as through social media mediums.
9. We found that the teachers who recorded lessons during the pandemic mostly published them through the only educational portal approved by Ministry of Education- EDUINO.

10. Final conclusion: The training for creating video content should be understood as a very noble idea that will encourage creativity among our teachers, and creative teachers are the biggest assumption and motivation for creative students, who will be involved in the teaching with interest, where instead of passively teaching will result in audio-visual content that will improve learning outcomes, will help the contents to be clearer, more understandable and adopted with a high degree of motivation, and all this will contribute to the realization of a teaching process in which instead of rote knowledge (which is very quickly forgotten), students acquire functional, permanent and applicable knowledge. On the other hand, teachers will gain important competence that they did not have before.

5.1.2 Bulgaria

Research conclusions

According to the questionnaire made through Bulgarian teachers, the following conclusions can be stated.

1. First of all the teachers in Bulgaria really understand the need of video materials in their work. Unfortunately they do not feel themselves prepared to create those kinds of materials. They regularly think of using video clips or films in their classes but they are not qualified to create them and do not know where to find such information. So we can conclude that they really need knowledge and skills that can be given in an appropriate course.

2. Secondly, the results show that students nowadays need creative and innovative methods to improve their results and motivation. Using video content is one of the most effective and interesting ways to do that. It leads to increasing the students' interest and the quality of education.

3. According to the survey the teachers agree that data protection should be the most important when they share video content. Other aspects that should be respected are copyright, privacy, protection against discrimination. These results mean that the teachers are aware of ethical norms.

4. Another important conclusion is that students should be encouraged to create their own video content in different forms – projects, homework, classwork etc. But there are a few problems that should be solved. These are: providing equipment and software, support and guidance.

5. Another important point is that video content should be made accessible to children with special needs. It could be a great resource, but it must be used careful and to be adapted to different children and different cases. That's why the best recommendation is to work on every case specifically.

6. The difficulties that have to be overcome according to the teachers are: script writing, recording work, editing video content and theory. It means that the pedagogics need to improve their qualification in all of the aspects of creating video content.

7. Last but not least, the survey shows that Bulgarian teachers were really creative during the pandemic. They recorded videos or used video materials from different platforms. It means that Bulgarian pedagogics are ready to step into creating and sharing video content but they do not know how to do it professionally.

Final conclusion:
Bulgarian teachers clearly understand the need of using video content in the educational process. They are creative and innovative but they do not have the competences to create their own clips or films. Surely, the students' motivation and interest will be increased if they create video content, too. Training for teachers should lead to better results in every educational aspect.

5.1.3 Serbia

Executive Summary

The research questionnaire, serves as an empirical instrument to scrutinize the adoption, utilization, and pedagogical implications of video content in Serbian educational institutions. The survey includes 25 questions, of which eight are demographic in nature, capturing variables such as gender, age, educational qualifications, and professional experience. The remaining 17 questions are specialized, focusing on the nuanced aspects of video content utilization in educational pedagogy. The survey elicited responses from a robust sample of 129 educators, thereby providing a comprehensive and statistically significant overview of the current educational landscape in Serbia.

Demographic Profiling

Gender Disparity: The survey reveals a pronounced gender imbalance within the Serbian educational sector, with a preponderance of female educators (76.7%) as compared to their male counterparts (23.3%). This demographic skewness is indicative of the gendered nature of the educational workforce in Serbia.

Educational Credentials: The survey respondents are predominantly well-educated, with a majority possessing higher educational degrees and a smaller, yet significant, fraction holding master's degrees. This underscores the high level of academic qualifications among Serbian educators.

Institutional Representation: The survey captures a balanced cross-section of educators from both primary (55%) and secondary (45%) educational institutions, thereby ensuring a diversified representation across the educational spectrum in Serbia.

In-Depth Analytical Insights

Inclusivity and Universal Design for Learning: A compelling 66.1% of Serbian educators advocate for augmenting the accessibility of video content to cater to students with special educational needs. This is not merely a statistic but a clarion call for educational reform. The educators recommend employing universal design principles such as subtitles, sign language, and auditory commentary. These are not just add-ons but essential elements that can make education more equitable. This finding is indicative of a heightened awareness and commitment to inclusive education among Serbian educators.

It also suggests that there is a collective consciousness about the moral and ethical imperatives of making education accessible to all, irrespective of their physical or cognitive abilities.

Pedagogical Versatility of Video Content: A substantial 55.1% of respondents opine that video content can serve a multifaceted role in enhancing pedagogical outcomes. This is a significant majority, suggesting that video content is not viewed as merely supplementary but as a core pedagogical tool. These roles encompass fostering trust and interpersonal relationships between educators and students, fortifying communal values and objectives, and nurturing diversity and individuality. This underscores the pedagogical versatility and multifunctionality of video content in Serbian educational settings. It also points to a broader understanding of education as a holistic endeavor that goes beyond mere academic achievement.

Strategic Dissemination and Outreach: A majority of educators (71.1%) endorse a multi-modal approach for the effective dissemination of educational video content. This is a strong endorsement for a diversified communication strategy. The approach amalgamates traditional platforms like school websites with contemporary mediums like social media and in-person events. This suggests that educators are not just content creators but also strategic communicators who understand the importance of reaching their audience through multiple channels. It advocates for a diversified and strategic outreach methodology that can maximize impact and engagement.

Digital Resilience during the Pandemic: The COVID-19 pandemic served as a crucible for assessing the digital resilience and adaptability of educational institutions. Alarmingly, a mere 24.4% of Serbian educators engaged in recording classes during this period. This is not just a statistic but a red flag that signals a critical gap in digital preparedness. It exposes a glaring lacuna in digital preparedness and adaptability and suggests that Serbian educational institutions were caught off guard by the sudden shift to remote learning. This points to an urgent need for building digital resilience through training and infrastructure development.

Professional Development and Skill Augmentation: A disconcerting 55% of respondents disclosed that they have not undergone any formal training in the creation and utilization of educational video content. This is a significant majority and highlights a critical gap in the professional development landscape for Serbian educators. It underscores the exigency for targeted skill augmentation initiatives that can equip educators with the technical and pedagogical skills required to effectively leverage video content in their teaching practices.

Motivational Dynamics: The survey unveils a somewhat ambivalent motivational landscape among Serbian educators vis-à-vis the adoption of video content. While 40.3% exhibit a proclivity towards its utilization, a significant 42.6% remain equivocal. This is not a mere division but a complex interplay of motivational factors that can include institutional support, perceived efficacy, and personal interest. It suggests that while there is a willingness to adopt new technologies, there is also a significant level of hesitation, possibly due to lack of training, institutional support, or even personal beliefs about the efficacy of video content in educational settings.

Implications, Recommendations, and Future Trajectories

The survey findings offer a plethora of actionable insights and strategic imperatives. Foremost among these is the pressing need for targeted professional development programs that focus on upskilling educators in the creation and effective pedagogical utilization of video content. Additionally, Serbian educational institutions must prioritize the implementation of universal design principles to make educational content more inclusive and accessible. Furthermore, a multi-modal and strategic approach should be adopted for the effective dissemination and promotion of educational content, leveraging both online and offline platforms.

Given the complex motivational dynamics revealed by the survey, future research could delve deeper into understanding the underlying factors that influence educators' willingness or reluctance to adopt video content in their pedagogical practices.

Conclusive Remarks

The survey serves as a seminal contribution to our understanding of the current state of video content utilization in Serbian primary and secondary educational institutions. This is not merely an academic exercise but a critical endeavor that has far-reaching implications for educational policy, pedagogical strategies, and institutional practices in Serbia. The survey illuminates both the untapped potential and the multifaceted utility of video content in educational settings. It reveals that video content is not just a supplementary tool but has the potential to revolutionize teaching and learning processes by making them more interactive, engaging, and inclusive.

However, the survey also starkly highlights the existing gaps, challenges, and areas necessitating targeted interventions. These are not minor obstacles but significant hurdles that need to be addressed through concerted efforts involving policymakers, educational leaders, and teachers.

The gaps in professional development, for instance, are not just individual shortcomings but systemic issues that require a comprehensive overhaul of existing training programs. Similarly, the lack of digital preparedness exposed by the pandemic is not just a logistical challenge but a strategic vulnerability that requires immediate attention.

As such, the survey findings should serve as a catalyst for policy formulation, strategic planning, and targeted interventions aimed at optimizing the pedagogical efficacy and inclusivity of video content in Serbian educational settings. This is not just a recommendation but a call to action for all stakeholders involved in the Serbian educational system. It is an invitation to engage in a collaborative effort to harness the transformative potential of video content for the betterment of educational outcomes and the enrichment of the teaching and learning experience.

The survey also opens up avenues for future research, particularly in understanding the complex motivational dynamics among teachers and the institutional barriers that hinder the effective implementation of video content. These are not peripheral issues but central concerns that have a direct impact on the quality of education and require in-depth investigation.

In summary, the survey serves as both a mirror and a window: a mirror reflecting the current state of affairs in Serbian educational settings and a window opening up possibilities for future innovations and improvements. It is a foundational document that provides both a diagnostic assessment and a strategic roadmap for the effective integration of video content in Serbian educational practices.

understand the need of using video content in the educational process. They are creative and innovative, but they do not have the competences to create their own clips or films. Surely, the students' motivation and interest will be increased if they create video content, too. Training for teachers should lead to better results in every educational aspect.

5.1.4 Slovenia

Research conclusions

The survey, which was completed by 165 primary and secondary school teachers throughout Slovenia, showed that teachers have a great desire to introduce videos into the learning process. Only a small percentage of respondents do not think about it, as they probably do not have the knowledge or they are not motivated for such learning. The majority of respondents think that this is important, as it improves the motivation of students or helps in acquiring new knowledge.

Most of them have no experience, as they have not yet attended training on the subject of video recording. There is interest among teachers in learning to record. They are open to education on this topic, expect additional education on this topic. You also need technical support for this work, which is the foundation of it. Teachers are aware of the need for copyright, data protection and privacy. Most believe that the most effective way to place video content in different subjects as a supplement to traditional school methods that include classroom lectures.

We see the introduction of video content as an increase in visualization in learning and a more effective reception of content. Teachers see this as a positive influence. The majority of teachers are of the opinion that the impact of the creation and use of video content on the quality of teaching is moderately or slightly positive. They believe that students need support and guidance when creating video content for educational purposes, and that video projects should be included in teaching and homework. In order to create good educational video content, teachers are of the opinion that it is necessary to master certain skills, and most of them believe that editing video content belongs to these skills. More than half of the surveyed teachers are of the opinion that it is necessary to bring video content closer to students with special needs with the help of subtitles, sign language or audio commentary.

Creating video content in relationships between teachers, students and families can have different roles. Most teachers believe that this can be to build trust and rapport, to promote shared goals and values, it can be a means of celebrating diversity and individuality, or it can be a mixture of all of the above. The most effective way to promote educational video content is through social media, the school website, presenting them at school events and meetings, or a combination of all of the above. The survey found that more than half of the respondents recorded hours and video materials during the Covid-19 pandemic. They were mostly published on the Arnes portal.

5.1.5 Spain

INTRODUCTION

The “General Spanish survey results” file has been developed by Mr. Joaquín Martín de Saavedra Rojas (President at Asociación Extremundo), using the original results of the regional/national data collection carried out by Mrs. María Victoria Chaparro Gallego (Vice-President at Asociación Extremundo) and Mr. Joaquín Cruzalegui Guyón (Responsible person for relations with Latin America at Asociación Extremundo).

Main facts

· Genders: the female one points out because of the participation of almost 70% of non-male surveyed teachers from a total number of 126 individuals;

· Education provided: up to 88, 9% of the surveyed teachers are working at high-schools;

· Locations: more than 50% (actually 60%) of the surveyed teachers work in rural areas;

· Subjects taught: regardless whether the teachers work in primary or secondary education centers, most of them do not teach general subjects, but specific ones;

· Educational levels: 59% of the interviewed teachers hold bachelor’s degrees, while 36, 5% hold master’s degrees and/or doctorates respectively;

· Work experiences: usually the surveyed teachers have 10 years or less of experience;

· Ages: the most common age groups are 41-50 (45, 2%) and 50+ (30, 2%);

· Skills: 81% consider that they have basic or moderate skills for creating and editing videos;

· Willingness: 85, 2% consider that they are eager for creating videos for didactic purposes;

· Skills importance: the vast majority believes that having these skills is quite important;

· The why: the 126 interviewed teachers think that educational videos can benefit different target groups like students, families and communities;

· Video trainings: the Spanish teachers have shown that most of them have not attended adequate training courses on video creation and edition, but they are willing to do so;

· Teachers encouragement: according to the results, teachers can be encouraged through different ways like technical support or training courses;

· Main fears: data protection and privacy limit teachers from taking videos where students are involved;

· Impacts: 85, 7% think that the use of videos in classes brings positive impacts;

· Motivations: most of the teachers are ready to motivate students to take action in educational videos creation;

· Mastering: 73% believe that different factors like scripts or camera work are requested to master;

· Special needs: 90% are for providing special needs students with extra resources like subtitles or sign language;

· Interrelationships: most of them consider that the creation of videos can improve the relationships between the following target groups: teachers, students and families;

· Promotions: the combination of web pages of educational centers, social networks and events held in those educational centers is the best way to promote didactic videos created by teachers according to themselves;

· Covid-19: during the pandemic, almost 58% of the surveyed teachers have recorded classes or materials in video, using platforms different than YouTube or eTwinning.

Main profile

According to the above mentioned information, the most common profile which has been surveyed by Association Extremundo is the one of a female high-school teacher from a rural environment who teaches a non-general subject, holds a high education level, has 10 or less years of experience, is between 41 and 50 years old, has basic or moderate skills for creating and editing videos, is eager for creating videos for didactic purposes, believes of the importance of having the project-related skills, thinks that educational videos benefit different target groups, recognizes that has not attended an adequate training course on the current project topic, but is willing to do so, believes that teachers can be encouraged through different ways like technical support, fears data protection and privacy, says that the use of video in classes brings a positive impact, is ready to motivate her students, believes that different factors like scripts or camera work are requested to master educational video creation, is for providing special needs students with extra resources, considers that relationships between teachers, students and families can be improved thanks to video creation, thinks that is needed to combine several resources to better promote didactic videos created by teachers and during the pandemic has recorded classes, using non-popular platforms.

Conclusions and recommendations

It is a must take into consideration that most of the teachers in Spain are women (it can be helpful to plan future logistics like room distributions).

It is recommended taken into consideration that they work in high-schools, which is important because of the ages of the potential students involved into video-projects (the older they are, the better for those projects).

It is a must to take into consideration that Asociación Extremundo has focused on analyzing a very concrete target: citizens from the Spanish region of Extremadura, which is quite rural (extra obstacles not to be forgotten during the #AndAction's implementation phase).

It is recommended taken into consideration that, according to them, they have already some skills on the KA220-SCH main project topic (it can be a good idea previously checking those skills to identify different expertise within the participating groups).

Spanish teachers show clear willingness and active participation; basically they are ready to keep learning and improving themselves (it can be used to get the best of them during every phase of #And Action, in order to submit an excellent final report).

Spanish teachers admit not having attended adequate training course on video creation and edition (it offers us a great chance to provide them for the first time with very professional training courses).

Spanish teachers lack competences (knowledge + skills + attitudes) on how to deal with challenges like data protection and privacy (how to manage these topics in a professional way could be added to our training courses somehow to enrich even more their experiences).

Spanish teachers promote inclusion for special needs students (how to better help these students about video creation and edition could be added to our training courses somehow to enrich even more their experiences).

Spanish teachers work with some platforms, but they do not use the whole potential internet offers (it could also be added to our training courses some sessions to get to know how to take a real advantage of YouTube or eTwinning).

6. References

7. ...and Action! partners

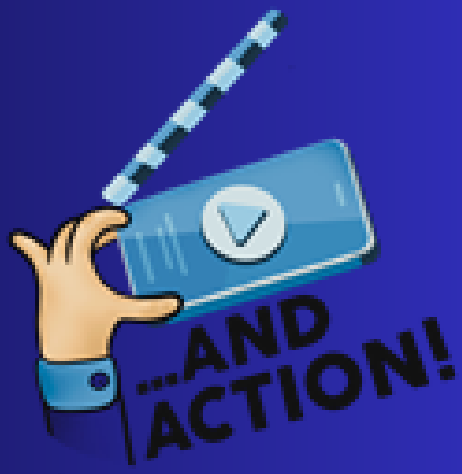
7.1 Cinematheque of North Macedonia

6.2 Zdruzenie tradicii obrazovanie istorija i kultura

6.3 EDC EXEDRA Association for Education in the fields of Natural Sciences, Arts and Architecture

6.4 Associacion Extremundo

6.5 Irig Moj Grad



Asociación Extremundo

КИНОТЕКА НА РЕПУБЛИКА СЕВЕРНА МАКЕДОНИЈА
KINOTEKA E REPUBLIKËS SË MAQEDONISË SË VERIUT
CINEMATHEQUE OF REPUBLIC OF NORTH MACEDONIA

СДРУЖЕНИЕ ТРАДИЦИИ ОБРАЗОВАНИЕ ИСТОРИЯ И КУЛТУРА

IRIG moj grad

EXEDRA