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THE EDUCATIONAL FILM IN STUDYING THE RURAL SETTLEMENTS OF ROMANIA

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Abstract

On the YouTube website, users may upload and watch audio-video resources. Many uploaded films may be used for free during the didactic process because they are a good educational resource. In the primary grades, using these films is conditioned by several factors: features of the films; the technology that the school, teachers and pupils have access to; teachers' and pupils' competences; school curricula, etc. This research investigates the process that a teacher carries out towards the selection and the didactic processing of a random film on rural settlements, retrieved from the Internet. Secondly, the paper determines how the teacher uses this product in the educational activity. Finally, we analyse the efficiency of the use pattern expressed in the amount and quality of knowledge acquired by pupils. Data collecting and processing were realised through interviews, visual methods, and observation. Findings were structured according to the following analyses: analysis of the film selection process, analysis of the process of adding the teacher's commentary to the film, analysis of the soundtrack of the film designed and recorded by the teacher, and analysis of learning activities organized based on the film. The teacher used two video conferencing platforms, namely Zoom and Loom. Compared to Loom, the Zoom platform offers several advantages. However, we discovered deficiencies in these platforms and devices because these virtual means are not created and adapted for the educational process and this is a challenge that should be addressed shortly.

1. Introduction

Starting with March 2020, the cessation of face-to-face teaching, learning, and assessment activities in the Romanian education system has led to the development of the online training process. Consequently, teachers have been motivated to make more use of web resources and tools. Therefore, according to the literature, there is a growing tendency among teachers to use videos in order to provide new information about a particular subject (Michel et al., 2007), to facilitate the acquisition of certain concepts, as well as to increase the knowledge level (Wijnker et al., 2019). In fact, there is a variety of film formats available to them such as educational films and animation (Roos & Van den Bulck, 2019), as well as videos that differ both in terms of the audio-visual presentation and the amount and structure of the information they provide (Wijnker et al., 2019). Moreover, nowadays, a considerable number of pupils and teachers benefit from affordable devices (Dulamă et al., 2019; Dulamă, Magdaş & Chiş, 2020), and more than that, they have access to a wide range of applications available free of charge, and to a technology that optimizes the filmmaking process (Roos & Van den Bulck, 2019).

In light of this, thanks to the Visual Technology, the study of dangerous phenomena, as well as of objects and places located at a considerable distance, is significantly enabled (Dulamă & Roşcovan, 2007), in other words, the world is brought to the pupil (Good, 2019) and environmental awareness is enhanced (Magdaş et al., 2018). For example, according to Markiewicz-Patkowska et al. (2019), the use of 3D films constitutes a way to stimulate interest, to foster teaching efficiency, and to increase the amount and durability of the acquired information. In the same vein, Ilie and Cristea (2020) note that when the most appropriate educational film for the given topic is chosen, and the teacher properly guides the primary school pupils in decoding visual content and in the learning process the amount of their knowledge increases, they develop correct environmental representations and, finally, they improve their observation and thinking skills.

With this in mind, recent studies (Roos & Van den Bulck, 2019) have shown that the most popular videos uploaded to YouTube, ESA, ESO and NASA have been primarily those with a musical background, then films with fewer explanation and finally, videos without any explanations – hierarchy explained by their entertainment value. However, the main drawback of this fact is that the large amount of information in a video doubled by its presentation in a short time can create negative effects on understanding and learning processes (see Arias-Ferrer, Egea-Vivancos & Monroy-Hernandez, 2019). In contrast, Wijnker et al. (2019) mentioned that videos with informative content transmitted by authoritarian speakers were associated with a growth of self-reported knowledge, while those in which pupils were addressed questions were associated with an increased interest.

2. Problem Statement

To decide which video on the internet is most appropriate for the learning activity in question, teachers have to watch several films in advance. Typically, most films that capture the geographical space of Romania have soundtrack; therefore, in such circumstances, the teacher should complete the film's message with a verbal description of what the pupils observe visually. Consequently, the teacher may be subject to several challenges by performing additional tasks related to: decoding the visual content, the

content development that will be exposed and explained while the pupils watch the film or the subsequent discussion of the aspects watched in the video in order to deepen knowledge and setting them in their memory. Therefore, all these activities of content transposition intended for a wider audience into a didactic one represent a complex issue that teachers must solve.

3. Research Questions

This exploratory research seeks to address the following questions: a) What is the strategy through which we can select the most appropriate film about rural settlements? b) What are the most effective techniques to add the teacher's remarks to the film? c) How should the verbal message/the film's soundtrack be designed to enable the understanding of visual content? d) How is such a didactic processed film implemented/used in the learning activities regarding rural settlements, namely, the activities that are carried out by the teacher together with the pupils of the preparatory class? and e) What are the students' opinions about the produced films?

4. Purpose of the Study

The aims of this study are based on three fundamental aspects. First, the research seeks to investigate the process that a teacher carries out towards the selection and the didactic processing of a random film retrieved from the Internet. In addition, the paper intends to determine how the teacher uses this product in the educational activity carried out with her pupils. Finally, we analyse the efficiency of this use pattern expressed in the amount and quality of knowledge acquired by pupils.

5. Research Methods

Research Procedure. Regarding the research procedure, several steps were taken in this exploratory research. For instance, in the first phase, the film was selected for processing. After that, the text was designed and added to the film. Later, the film was used in the online learning activity conducted on the Zoom platform. Ultimately, the pupils' results and performance were analysed.

Data collecting and processing. The interview method was chosen in order to find answers to the following issues: the strategies used by the teacher in selecting the film intended to be processed and operated for didactic purposes, the techniques used to add the teacher's comment to a film performed by a different author, as well as the pupils' opinions about the film and the learning activity attended. Research data were processed through tools specific of Educational Sciences (Magdaș, 2018). In addition, the films were analysed by visual methods. Also, by using the observation method, data related to pupils' behaviour during activities were collected.

Participants. Considering all this, 16 of the 31 pupils together with their teacher were involved in research. The pupils were part of a preparatory class at the "Gh. Ruset-Roznovanu" High School in Roznov, Neamț County, Romania. In this context, it must be specified that the teacher was perceived by pupils as an educator rather than a researcher. Moreover, the pupils who were not included in the study were involved in other activities together with their parents. The pupils involved in the research were divided into two groups of eight each. This was achieved in order to create the educational environment in which all of them,

including the shy ones, were able to communicate with the teacher and other colleagues and were asked and encouraged to express their opinions in order to gain confidence. The groups were balanced, according to pupils' gender and living environment (urban/rural). Moreover, the level of competences achieved, as a result of drawing up the evaluation report at the end of the preparatory class, was taken into account.

Accordingly, the first group consisted of six girls and two boys of which three pupils lived in villages, two lived in the town of Roznov, and three lived in villages that belonged administratively to this town. The second group consisted of five girls and three boys of which, one child lived in the village, five children lived in the town and only one lived in a village within the town. In each of the two groups, there was a student living in a block of flats, while the others lived in private houses. Further, the research material is based on four main data sources: movies about rural settlements on the YouTube website, didactic films made by the teacher with the addition of the comment for educational purposes, video recordings of the two learning activities carried out on the Zoom platform, and last but not least, the answers of the teacher's and of the pupils' to the interview questions.

6. Findings

6.1. Analysis of the film selection process

To identify the right film for the topic "Rural Settlements", a straightforward keyword-search strategy was used. The keywords, namely "rural settlement" and "village", were placed into the Google search engine and the search was later directed to the YouTube website, which is intended for uploading and watching movies. Additionally, this search procedure generated a long list of other videos. Therefore, the selection process was a long-term one, mainly because it involved watching and analysing 36 individual films according to the following criteria: content, duration, the way the film was made, and the quality (clarity) of the video. Therefore, the film entitled "Satul SUPLAI - văzut de sus - Un colț de RAI!" ["Suplai Village – seen from above – A piece of Heaven!"] of Zagra commune, Bistrița-Năsăud county was selected. Its properties consisted of a duration of 3 minutes and 10 seconds with a size of 25.7 MB and an MP4 File format. Moreover, the video was made by Cristian Morar (filming) and Iosif Ciunterei (video montage) and on October 20, 2018, it was posted on the YouTube channel "Cu Iosif pe coclauri" ["With Iosif on the Hills"] (Morar & Ciunterei, 2018). The filming was done with a drone and had a musical soundtrack. The main reason this film was selected was that it had a short duration, the heart of the village was very well presented (i.e. the houses, the buildings, the street network), and the land of the village (e.g. varied land use, particularly the grassland and the forest). Moreover, being an aerial footage (from above), these space details were easy to notice by pupils.

6.2. Analysis of the process of adding the teacher's commentary to the film

For processing, it was decided to download the video in the MP4 Video File format in our own computer. This step was achieved by using the "Keepvid video downloader online" application and the YouTube to MP3 Converter website. Further, concerning the adding of the commentary to the film, we analysed and tested two applications available on the www.loom.com and www.zoom.com websites. Typically, adding the soundtrack to educational films can be done on both above-mentioned sites. Anyway,

despite its usefulness, the application on the www.loom.com website has some disadvantages. For example, the first thing to remember is that the free of charge period is only a month, after which the records can be accessed only with the monthly/annual payment. Unfortunately, because the recorder made on the www.loom.com website was 76.5 MB in size, it could not be sent via e-mail towards pupils. In addition, another aspect that had to be considered was that the soundtrack was replaced in a PowerPoint presentation with the integrated film that had a size of 76.8 MB. However, when the teacher sent the link from his account created on www.loom.com, the films could be viewed and downloaded by pupils.

More than that, although the access to the Zoom cloud Platform is free of charge, the main shortcoming is that it does not provide space or any option to storage videos. As a result, they can only be saved to the personal computer, Google Drive, or to external memory drives. For instance, the film to which the commentary was added was automatically saved in the personal computer. Further, after the recording was converted, the film could be stored in the selected folder. The recording contained the original film, in which the musical soundtrack was replaced with the teacher's commentary. This recording made on Zoom was 20 MB in size, smaller than the previous one. Also, the soundtrack was added in the 14.4 MB PowerPoint version with inserted video. We noticed that the commentary adding techniques on the www.zoom.us platform were more efficient because they reduced the amount of information (MB) and therefore, allowed the transfer of the educational film to pupils via electronic writing.

However, as the teacher was not trained to use such specific tools, recording the comment was a time-consuming process. Equally important, other limitations of the study were related to the clarity of the recording caused by the teacher's diction, her subjectivity regarding the warm tone of the voice determined by the fact that she addressed her own pupils, as well as, by the difference in the tone of the recorded voice compared to the "story" one that was familiar to pupils.

6.3. Analysis of the soundtrack of the film designed and recorded by the teacher

To elaborate the written text that belonged to the visual support of the film, the specific information that the pupils can acquire was chosen. In this connection, two main objectives have been established for this subchapter. For instance, the first one aimed to define the concepts such as human settlement, village or rural settlement, rural household, heart of the village, the village land with the arable land, and the grassland. In addition, the second goal was to list the component elements of the village and of the rural household. The second author developed two versions of the text (A, B) to be recorded as the soundtrack of the film.

The process of transforming academic content into content accessible to pupils in the preparatory class was difficult to achieve. This matter was caused by the fact that it was desired that the presentation of all the chosen information be in a brief form, with a language accessible to children, in a short period of time and in a logical order. From the analysis of the text, we notice the large number of geography-specific terms (e.g. village, human settlement, inhabited, people, city, living conditions, rural household, constructions for public interest, street network, building density, village land, arable land, grassland, pastures, forests, orchards, vineyards, etc.). The content of the commentary was as follows (Table 1):

From the analysis of the oral text heard when the film was being watched, it was noted the difficulty of watching and decoding it because there was no synchrony between the images running on the screen and

the "spoken" message of the film. Therefore, the first author created a third variant to synchronize the images as much as possible with the oral message but keeping the information structures. Accordingly, the content of the three variants had a high degree of similarity. We concluded that it was difficult to present a systematized didactic content on a certain topic associated with a film made by another author. In this case, the optimal solution was to accurately describe what was seen in the film, but in accordance with the internal logic of geography rather than by relating all the information concerned.

Table 1. Version B of the commentary for the film

In this film, we see Suplai village of Bistrița-Năsăud County. The village is a human settlement, a place where people live. However, compared to a town, fewer people live in a village. Besides that, to have better living conditions, each family in the village has developed a household. In a rural household, the house is facing the street or country road. In the yard, there is a summer kitchen, barn, cows' stall, pens for pigs, birds and rabbits, toilet, fountain, and other constructions. Moreover, the area occupied by dwellings, animal shelters, feeding stuff deposits, human food deposits, or buildings for the public interest is called the hearth of the village. The buildings for public interest are composed of school, village hall, church, dispensary or medical office, post office, shops, community centre and others. In the village, dwellings and other buildings that have 1-2 levels are the most common. Further, another interesting fact is that the building density in villages is lower than in towns. The street network consists of poorly developed streets and alleys. On the side of the streets, there are ditches/gullies and sidewalks. The area outside the village is called the estate of the village. The arable lands, hayfields, pastures, forests, orchards, and vineyards occupy the land outside the hearth of the village. Moreover, cereals, potatoes, sunflowers, rapeseed, etc. are grown on the arable land. The hayfields are the mowed grassland from which the hay (dry grass) is collected. We recognize them by the bales of hay.

Analysing this activity from the perspective of the teacher for primary education, it is noted that this she did not provide the specialized skills that a geography teacher possessed, for instance to make the most appropriate geography-specific commentary. On the other hand, we consider that the activity has the necessary psycho-pedagogical features to deliver information to pupils in the form that they can process it and hear it simultaneously. Therefore, to facilitate the understanding of the visual content, the verbal message of the film should contain the explanations of the concepts or, in addition, the detailed presentation, or description of the components right after their mentioning. The degree of understanding of the content could be much higher if the terms used had correspondent/synonyms in the young pupils' usual language and in the sphere of their concerns or in their living environment. The message should be sent in a warm voice, with variations in tone intensity and using pauses.

6.4. Analysis of learning activities organized based on the film

The activities were organized in June 2020, on a day without other school activities, in a time frame that allowed parents to provide support to their children. Between the hours of 18-18:40, the activity took place in the first class, while between the hours of 19-19:40 in the second class. The total length of an activity was 40 minutes, of which the teacher allowed 10 minutes for pupils to access the conference type online meeting that was conducted on the Zoom platform, as well as for interrelationship discussions.

In order to verify the pupils' previous knowledge about rural settlements, they were requested to explain the meaning of certain concepts as follows: human settlement, rural household, village hearth, street network, village land, village boundary, arable land, and finally, hayfields. Thus, results showed that the

pupils in the first group failed in explaining these concepts even though three of them lived in villages. Moreover, in the second group, a child who lived in a village defined the village as "place with few people and few houses". Certainly, the pupils in the preparatory class had some representations of villages, especially in the form of images, but it was difficult for them to quickly establish the connection between the name of the concept and its content expressed in attributes.

Pupils were invited to watch version B (Table 1) of the film about the village of Suplai, and were informed that, after watching, they would be asked to answer a few questions. Given the fact that at the time of the film's distribution, the pupils did not hear the soundtrack recorded by the teacher, she reduced the volume to a minimum, played the film without sound, and added her commentary live. Up next, watching the film was followed by a session of eleven questions. Therefore, after the analysis of the questions and the answers had been performed, first of all, it was remarked that the following four questions remained unanswered: What is a human settlement? What are the components of a rural settlement? What is the name of the area occupied by buildings in a village? What is the name of the area outside the village? On the other hand, to other questions, the pupils provided a considerable amount of information that was previously acquired from other sources, namely: *What is cultivated on the land outside the village? (Potatoes are grown.) What animals grow up in a village? (Yes, cats and puppies.)* Moreover, two answers indicated two essential visual characteristics that children noticed about the village and the town: *"The village means small houses." "The city has more houses."* To a general question – *"What was this film about?"* – the answer offered was *"It's about houses, trees"*. This shows us the elements that had a visual impact on pupils. The answer to a single entry is probably deduced from the film: *What is the street network of a village made of? (It consists of streets.)*

Given the fact that they were unable to answer questions, the pupils displayed dissatisfaction that was visible in their facial expression, in their whispered voice and in their lack of courage to answer. However, although the teacher gave positive feedback on all the answers, which is important for pupils' emotional resilience at this age (Fetti & Albulescu, 2020), the online activity was rather stressful for teacher and pupils. First, the online activity induced communication blocks. Further, because of the 40-minute operating limit of the platform, the dialogue took place under the pressure of the time factor. On the other side, face-to-face learning activities provided a much safer socio-emotional communication environment.

Coming up next, the teacher proposed to pupils a second viewing of the film that had a commentary with a higher degree of timing with the images displayed on the screen (the version recorded on the zoom.us platform; PowerPoint presentation with the inserted film). Once again, because of the poor sound quality on the pupils' devices, the teacher had to comment live. The second question session was like the previous one and received from the first group similar answers to those formulated after the first viewing. Thus, in the second group, the pupil living in a village provided the extensive, in-depth, and detailed contributions. He described the village as "a place with few houses and people, with few roads"; he termed the haystacks and described them as "thick wooden sticks stuck in the ground with hay on them". In the same vein, a little girl explained that hay was "dry grass." In addition, the children listed several components of the rural household (e.g. kitchen, toilet), and yet, they incorrectly included birds and rabbits in this category. Further, they specified that the road network was "made up of streets and country lanes" and that the arable land was "the land on which cereals are cultivated".

As a result of the second viewing, we noticed that the pupils who lived in the village, specifically in houses, provided more comprehensive answers. By the fact that, when pupils gave explanations, they made connections with the reality of their garden or village, we can deduct that the description of information was influenced by the knowledge of the environment in which they lived. At the group level, students listed and portrayed what they saw *(a church, a school, mountains, beautiful meadows and many trees, "small" or multi-storey houses)* and, although they were asked several times, they did not refer to the information they listened to during their teacher's presentation. The fact that students did not acquire some concepts (e.g. human settlement, rural household, village hearth, village land, village border) after the two views was explained by their degree of complexity and their abstract character. Actually, all these concepts represent sets of elements with great spatial extension and their perception in reality requires a much more rigorous and longer process of perception and representation.

7. Conclusion

By analysing the process carried out by a teacher through which he chooses the most appropriate film to study the topic "Rural settlements" with primary school pupils, we found that the strategy used was the keywords search. The results consisted of a very long list of videos on the YouTube website intended for the general audience, many of them with a music background. The process of choosing the right film entailed watching 36 films. This required large resources of time and the collection of information based on certain criteria (content, duration, way of making the film, quality/clarity) about the films watched. The non-existence / non-identification of a film to provide an explanatory commentary on the images displayed on the screen required the development of a text by the teacher.

Analysing the process of adding the teacher's commentary to the film, we found that four variants were made, through the easy use of video conferencing platforms, namely Zoom and Loom. Two different procedures were followed on both platforms. Compared to Loom, the Zoom platform offers several advantages: free permanent access, condensed information processing in fewer MB. However, Zoom platform does not offer video storage space.

Because image-sound synchronization was required, the process of creating the text to accompany the filmed images was difficult to achieve. The option for transmitting the desired information, to the detriment of synchronization, generated a poor perception of the contents by the pupils. Moreover, the synchronization of images from a film made by another author with their verbal explanation diminishes the chance of providing the desired amount of information, structured according to the logic of a certain science field.

The use of the processed film (PowerPoint version) on the Zoom platform for viewing by pupils was disturbed by the poor sound quality on the pupils' devices. For this reason, the teacher delivered the comment live. We thus found the existence of deficiencies in the platforms and devices. Consequently, because these virtual means are not created and adapted for the educational process, they can induce problems during online activities. Thus, in such circumstances the teacher must find proper solutions immediately.

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