

Guiding the Creation of Graphic Organizers through Films

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Abstract

The Romanian preuniversity geography teaching system rarely uses graphical organisers as information organisation tools, despite countless recommendations and examples found in scientific literature. YouTube contains numerous films in English, depicting how graphical organisers are developed using software and film apps and which present the way to create and use them in a didactic manner. However, YouTube offers few Romanian films on the two subject matters. The paper analyses the way to create such films, the software app used, the strategy proposed by the authors to aid others in creating this scheme, soundtrack concept (oral text) and the visual means.

Keywords: Geography, Visual imagery, Learning in university, Pre-university education, Tutorial, YouTube

1. Introduction and Theoretical Background

Graphical organisers are presented in Romanian didactic papers as teaching-learning-evaluation tools (Gavrilă and Nicolae, 2015, p. 3), used to organise information and build knowledge through a visual representation somewhere between text and illustration (p. 7). Information processing and organisation is classified by some didacticians as ability (Dulamă, 2010a, 2010b).

Scientific literature describes and gives examples of several graphical organisers – tables, matrixes, schemes (linear, branch, cluster, pyramid, systemic, circular or sequential), diagrams/charts (Venn, Ishikawa) (Dulamă, 2000, 2008a) – classified based on how they look (Dulamă, 2009a, pp. 319-320). Several papers depict the ways to construct some graphical organisers: cluster (Dulamă, 2002a, 2002b), SWOT analysis (Dulamă, 2004a), tables (Dulamă, 2008b) and others (Steele, Meredith and Temple, 1998a, 1998b; Dulamă, 2002b, 2008a, 2009b). These are made by teachers on blackboards during lessons (Dulamă, 2002b, 2002c; Dulamă, 2004b), by pupils in their notebooks (Dulamă 2010a, 2010b) or during preuniversity (Dulamă, 2004b) or university assessment examinations (Dulamă and Ilovan, 2004).

When it comes to pupils learning about the manner to structure information in graphical organisers, the literature mentions the fact that such a process can be attained during the first

classes, at any moment of the lesson, starting from simple procedures and ending with more intricate ones (Dulamă, 2009a, p. 319). Didactic papers recommend pupils first write down the graphical organisers (from now on GO) in their notebooks. Later, pupils can develop GOs in groups, pairs or individually (Dulamă, 2009a, p. 319). To graphically process information from a certain text, several steps must be taken: information analysis from the text, extracting essential information, and criteria-based information classification (Dulamă, 2009a, p. 319). Some teachers emphasize principles hierarchically, chronologically, and causally, this eventually aiding information organisation in diagrams (Gavrilă and Nicolae, 2015, p. 8).

When developing GOs alongside pupils, teachers must consider several aspects: the pupils' cognitive level and learning style, objectives to be attained during the learning process, personal experience of teachers and pupils in devising GOs (Gavrilă and Nicolae, 2015, p. 9). Some emphasize the connection between content specificity and GO characteristics through which it can be represented (Dulamă, 2009a), the need to follow proportions in drawings and texts, and to limit the length of texts (Gavrilă and Nicolae, 2015, p. 9).

There are very few Romanian studies regarding GOs usage by teachers in their didactic activity with pupils and students (Cîineanu, Miron and Dulamă, 2020), on the efficiency of using GOs in university studies (Cîineanu et al., 2020a, 2020b) – although their use could impact greatly learning about complex geographical processes and phenomena (Roşian et al., 2016) – and assessment procedures (Dulamă and Ilovan, 2004). Although didactics papers support the importance of GOs in gaining knowledge and creating abilities (Dulamă, 2010a, 2010b), that such work techniques help pupils “think, visualise and organise their own knowledge” (Gavrilă and Nicolae, 2015, p. 8), teachers rarely use graphical organisers in the educational process. In order to aid those students who will eventually become teachers as well as actual teachers to use different learning procedures and activities based, inclusively, on cluster techniques, several educational films have been uploaded on private Facebook groups (Dulamă et al., 2019; Dulamă, Magdaş and Chiş, 2020). We aim to analyse the available films on the Internet, especially those through which someone might comprehend the full importance of GOs in education, as well as how to create such GOs. The investigation will be twofold: films in English and films in Romanian. We aim to find answers for the following questions: Where and how to find films for developing GOs? What kind of GOs are presented in films? The creation of which GOs is presented on film? What kind of strategies to guide GOs creation are presented?

2. Method

Data Collecting, Procedure and Research Material. With the help of the observation method, we collected data regarding the strategies (methods, procedures, means) used by film creators, in order to help others learn how to create GOs. We applied the thematic, subjective, and reiterative analyses (Băban, 2002) on the content (text) of films. We also analysed GO features (colours, structure, components, etc.) using visual means. With the help of a focus grup, we collected information on the analysed films and their usage in the learning process. The research material is made of the content (text) and images of the analysed films, the observations from visualising those films, and the answers and observations from the focus grup.

The participants in this research are the authors of this study. They devised the research as three mentors teaching geography in preuniversity classes, a professor teaching geography classes at university, a geography researcher, and a professor teaching geography didactics at university.

3. Results and Discussions

The Internet currently provides a vast array of learning tutorials. We analysed the situation of those tutorials which provide guides for graphical organisers and other films tackling the subject.

3.1. Specificities of English films dedicated to creating graphical organisers

After analysing the films found on YouTube, it is clear there are two categories: films depicting GOs development through apps, which require and aim at digital abilities, and films depicting information organisation in different types of GOs, which require and aim at didactic competence and learning abilities.

a. Films for developing GOs using various software apps. YouTube provides a rich series of such short films, created by people with diverse backgrounds, who aim to freely share their knowledge and experience. Out of this vast offer, we analysed only a couple of films, generated in the first stage of research. Table 1 contains a list of various apps (Microsoft Word, PowerPoint, SmartArt) used to create GOs with the help of a PC. There are similar ways to create different shaped boxes, line and arrow tracing, but there are some apps providing predetermined formats. These films have several important characteristics for learning: short length, which is crucial as they do not require extended amounts of time to watch; there are intuitive, therefore digital veterans can easily learn how to create a GO; information relay through auditory and visual cues; speaking speed allows for a better understanding of information.

Table 1. Examples of films aiming to demonstrate GOs development through software apps

Author	Length in minutes	Used app	Short description
<u>The Tech Train</u> , 2018	9.11	Microsoft Word	It explains and demonstrates how to create mind maps or brainstorms quickly and easily. Demo (writing, line tracing) also has auditory explanations (Fig. 1).
Wdvideoeducation, 2020	11.3	Microsoft Word	It depicts steps used to create flowcharts, mind maps, web, learning maps, etc. It shows how to create a pyramid structure (box creation, arranging them on a line, line tracing for connections, writing in boxes).
Hillaryjbro wn 2018	5.45	PowerPoint	It explains and shows how to create a Mind Map. It shows how to write words in boxes, trace lines, create oval shaped boxes (multiplication, page arrangement, size change, colouring) and assembling them into formats.
Software Spring, 2017	8.15	PowerPoint	It presents Flowchart creation. Visual demo has a musical background, with no verbal cues, only written. Visually, there are coloured boxes (rectangles), their alignment, and movement/arrangement in space.
LinkedIn Learning, 2013	4.33	SmartArt	It presents creating pyramid structures, using a predetermined scheme. It presents text introduction, box creation, etc.

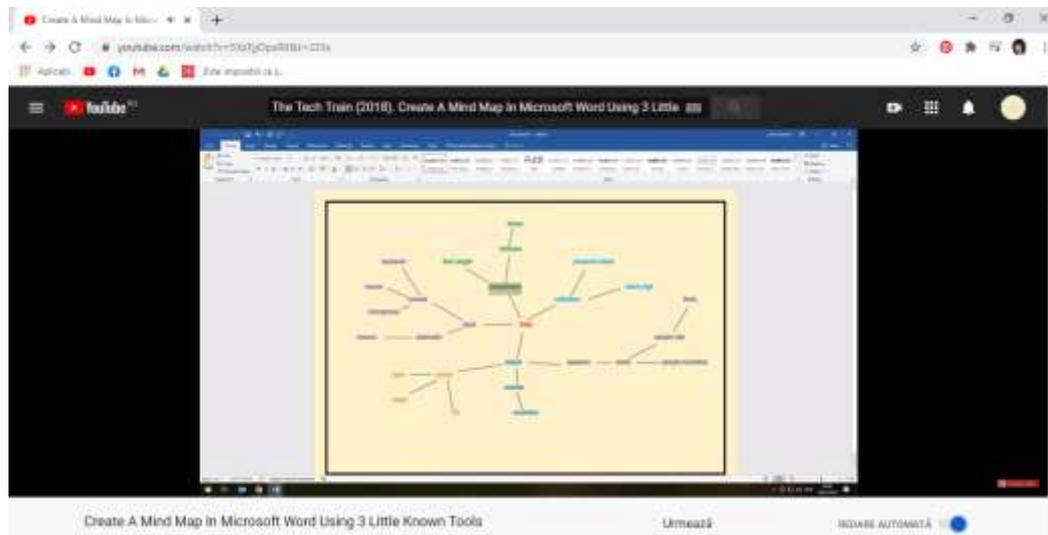


Figure 1. Screen capture of a tutorial on mental map creation using Microsoft Word (The Tech Train, 2018)

b. Diversity of available GOs and tutorial offer in MindMaster app. A 2.42-minute film promotes various types of GOs concepts, with a musical background (Wondershare Edraw, 2017) and recommends downloading Edraw MindMaster. The MindMaster app is a professional mind mapping tool, available on PC, tablet, smartphone, and websites, both user-friendly and versatile (Wondershare Edraw, 2019). It offers 12 different structures for education, economy and personal (individual) use: Graphic Organizer, Charts and Graphs, Engineering Diagram, Floor Plan, Science Illustration, Business Diagram. Graphic Organizer (Main Idea and Detail, Graphic Organizer, Vocabulary Study Graphic Organizer, Storyboard, Compare and Contrast Graphic Organizer, Sequence Chart, Grid and Matrix Graphic Organizer, Writing Graphic Organizer, Reading Graphic Organizer) (Wondershare Edraw, 2019). Flowchart, Mind Map (Mind Map; Concept Map; Bubble Diagram; Brainstorming Diagram), Basic diagram (Circular Diagram; Venn Diagram; Pyramid Diagram; List Diagram; Arrow Diagram; Circle Spoke Diagram; Timeline), Organizational Chart (Basic Organizational Chart; Photo Organizational Chart; Functional Organizational Chart; Matrix Organizational Chart; Family Tree; Genogram) are useful for information organisation in education (learning) environments (Wondershare Edraw, 2019). From an educational standpoint, it is highly important the large variety of classified schemes, which can be utilized for information structuring during the teaching, learning and evaluation processes. Moreover, the app provides technical support through a Video Tutorial.

c. Films on GOs creation, in educational contexts. YouTube provides several films after googling *Graphic Organizers*. A film (3.06 minutes), created by Teachings in Education (2018), presents numerous GOs: comparison GO (Venn diagram), concept GO (webbing), descriptive GO (T-Chart), and sequence GO (Events Chain). Content completion is exemplified on a Cause & Effect GO. The author writes and draws directly on the screen, verbally explaining as he does it. Another film (1.49 minutes), compiled by Wondershare Edraw (2019), hastily depicts 12 GOs: Venn diagram; Timeline; Story Map; Main Idea & Details; Spider Map; Vocabulary Chart; Compare & Contrast; KWL & KWS; Hamburger Writing; Fact & Opinion chart; Observation Chart. For each category, it states the name, subtypes, visual GO organisation for each type and subtype. Both presentations are useful for coming into different GO formats. The presentation is fast-moving, thus requiring frequent pauses to enable a better comprehension and analysis. The films are designed for people familiar with GOs and an average ability level in creating such organisers.

3.2. Specificity of Romanian films, designed for graphical organiser creation

We identified several Romanian language films on YouTube presenting diagram development using PowerPoint (Iuga, 2008), Microsoft Excel (Net, 2013; Chiperi, 2016), and Google Sheets

In a film for students, Botez (2013) (8.52 minutes) presents how to create a mental map based on the existing information from “Mental maps” by Tony and Barry Buzan. In order to compile the film, he uses a digital board (IQBoard). He proposes that each student introduce a self-analysis in the map. As demonstration, the author puts an image of him in the centre of the board (“a caricature,” in this case) and proposes several elements to be included in the analysis (personal attributes, family, friends, work, etc.). He also makes suggestions regarding designing mental maps: we write the word, then we draw the lines; if at first, we do not succeed, we try again.

Ina Ilie (OnlineTeachers, 2020) presents the mental map as an instrument, a method to learn for examinations. The presentation is structured based on questions that are gradually introduced as the demo and explanation run: “*What is a mental map?*” “*How do we create a mental map?*” “*Why do we put the topic in the middle?*” “*Why did we put this drawing in the middle?*” “*What do these branches mean?*” “*Why curved lines?*” “*How do I remember all this?*” The film is made for students and the definition of the mental map is built at another level: “as a scheme”, which allows us to grasp “a large amount of info in a small place”. Across the explanation, there are references to the way the human mind processes information and how mental maps help in this matter, a “wonderful instrument to organise and retain information”.

In the *Didactic films* private group, we presented “Cultivated plants (cluster organiser)”, for students preparing to become geography teachers. The introduction presents the importance of creating the cluster scheme (organization, mental information systematization based on logical criteria. The film emphasizes the description of the way to organise information: represented topic – title “Food plants” is placed in an oval in the centre of the page; plant categories written in ovals around the central theme, called “satellites” (cereals, oil plants, pulse, fruit, citrice, plants for drinks) and connected to the main represented subject through lines; names of plants from each category, written in the exterior ovals or circles. “Why is this scheme helpful?”, we ask and then we emphasize that, looking at the general picture of this GO, we see the plants from each category. We also mention the fact that the scheme might be restructured considering the geographical area where each represented plant is cultivated. At the end of the film, we set some rules that must be observed: write a name in a circle, but not long texts; names must be correctly written; do not write in all capital letters as it is hard to read and comprehend, etc. As the film is made for future teachers, we also depicted the strategy each teacher must follow to help pupils create such organisers. At first, the teacher draws the organiser on the board, and the pupils copy it in their notebooks, taking into account the format on the board (landscape or vertical). Then, pupils can devise the organiser on their own, while the teacher monitors their activity.

4. Conclusions

Based on the films we analysed, several conclusions have been drawn. There is a large archive of English short films, created and freely distributed by people of different educational backgrounds, aiming to share their experience in developing graphical organisers with the help of apps (Microsoft Word, PowerPoint, SmartArt), but also films aiming to teach how to structure information in different types of graphical organisers. There is also specialised software in English that aids in creating graphical organisers for economics, education, personal use (MindMaster), this app being at the same time an excellent source of information about the many ways to systematise and present information.

YouTube hosts very few Romanian films. We identified films depicting how to create GOs using software, as well as films for information organisation into schemes. The Romanian films from the second category are created for a wide audience (children, pupils, students, teachers) and are made using various means (flip-chart, smart board, PC), various methods (flip-chart, explanation and demo on split screen, static presentation in PowerPoint, or dynamic presentation,

with object manipulation on screen). The text used by the films' authors is differently structured, depending on the authors' background (psychologist, expert on didactic content, teacher) and target audience (children, pupils, students, teachers). These films are especially useful for those who are aware of the importance of creating graphical organisers for structuring and acquiring information.

References

- ACCED (2019): *Despre harta mentală* [On Mental Maps], <https://www.youtube.com/watch?v=AZMIOtAROXU>, accessed 2020.
- Botez, M. (2013): *Tony și Barry Buzan - harti mentale - demo 1* [Tony and Barry Buzan – Mental Maps - Demo 1], <https://www.youtube.com/watch?v=z7n-yp7bdek>, accessed 2020.
- Butuc-Brigai, M. (2020): *Tutorial Wise mapping, creator de hărți conceptual* [Wise Mapping Tutorial, Conceptual Creator of Maps], <https://www.youtube.com/watch?v=LS6LS5JxfDI>, accessed 2020.
- Buzan, T. and Buzan, B. (2012): *Hărți mentale* [Mental Maps]. Curtea Veche Publishing, București.
- Chiperi, G. (2016): Tutorial - Diagrame in Microsoft Excel [Tutorial - Charts in Microsoft Excel], https://www.youtube.com/watch?v=fzhi_FincZL, accessed 2020.
- Ciineanu, M.-D., Dulamă, M.E., Ilovan, O.-R., Jucu, I.S., Boțan, C.N., Păcurar, B.N. and Colcer, A.-M. (2020a): Developing Geographical Thinking through the SWOT Analysis of Human Settlements. In *8th ERD Conference, European Proceedings of Social and Behavioural Sciences*, Babeș-Bolyai University, Cluj-Napoca (under print).
- Ciineanu, M.-D., Dulamă, M.E., Ilovan, O.-R., Rus, G.-M., Kobulniczky, B., Voicu, C.-G. and Chiș, O. (2020b): Using the Venn Diagram for Developing University Students' Analytical Geographical Thinking. In *8th ERD Conference, European Proceedings of Social and Behavioural Sciences*, Babeș-Bolyai University, Cluj-Napoca (under print).
- Ciineanu, M.-D., Miron, C.M. and Dulamă, M.E (2020): Some Geography Teachers' Perceptions of Graphic Organizers. *Romanian Review of Geographical Education* 9, 1, 60-81.
- Comunastarchiojd (2013): *Cerc ped. – Toamna - Ciorchinele 2* [Pedagogical Meeting – Autumn – The Cluster 2], https://www.youtube.com/watch?v=xDo_q6TQyYo, accessed 2020.
- Dulamă, M.E. (2000): *Strategii didactice* [Teaching Strategies]. Clusium, Cluj-Napoca.
- Dulamă, M.E. (2002a): Clustering Thoughts. *Thinking Classroom* 3, 2, 47-48.
- Dulamă, M.E. (2002b): *Modele, strategii și tehnici didactice activizante cu aplicații în geografie* [Activating Models, Strategies and Didactic Techniques with Applications in Geography]. Clusium, Cluj-Napoca.
- Dulamă, M.E. (2002c): Organizarea grafică a conținutului unei lecții [Graphic Organization of the Lesson Content]. In I. Țepelea and C. Antal (eds.): *The 27th Annual Congress of the American Romanian Academy of Arts and Sciences (ARA), Proceedings I*, 2003. Polytechnic International Press, Oradea.
- Dulamă, M.E. (2004a): Dezvoltarea gândirii critice prin analiza SWOT [Developing Critical Thinking through SWOT Analysis]. *Didactica Pro* (Chișinău) 3, 25, 60-65.
- Dulamă, M.E. (2004b): *Modelul învățării depline a geografiei* [The Model of In-depth Geography Learning]. Clusium, Cluj-Napoca.
- Dulamă, M.E. (2008a): *Metodologii didactice activizante. Teorie și practică* [Activating Teaching Methodologies. Theory and Practice]. Clusium, Cluj-Napoca.
- Dulamă, M.E. (2008b): Utilizarea tabelor – ca model constructivist de organizare a informațiilor despre orizontul local [Use of Tables – As a Constructivist Model for Organizing Information on the Local Horizon]. In M. Bocoș, V. Chiș, I. Albușescu and C. Stan (eds.): *Tradiții, valori și perspective în științele educației*. Casa Cărții de Știință, Cluj-Napoca, 374-379.
- Dulamă, M.E. (2009a): *Cum îi învățăm pe alții să învețe* [How We Teach Others to Learn]. Clusium, Cluj-Napoca.
- Dulamă, M.E. (2009b): Utilizarea organizatorilor grafici în învățarea geografiei [Use of Graphic Organizers in Learning Geography]. In *Materialele Simpozionului Jubiliar Internațional „Mediul și dezvoltarea durabilă”, 70 ani de la fondarea Facultății de Geografie* [The materials of the International Jubilee Symposium “Environment and Sustainable Development”, 70 years since the founding of the Faculty of Geography]. Editura Labirint, Universitatea de Stat din Tiraspol, Chișinău, 311-316.
- Dulamă, M.E. (2010a): *Didactică axată pe competențe* [Competence-based Didactics]. Presa Universitară Clujeană, Cluj-Napoca.
- Dulamă, M.E. (2010b): *Fundamente despre competențe. Teorie și aplicații* [Competence Fundamentals. Theory and Applications]. Presa Universitară Clujeană, Cluj-Napoca.
- Dulamă, M.E. and Ilovan, O.-R. (2004): The Evaluation of the Students at the Course of Intercultural Education through Geography. *Science Education International. The Journal of the Internat. Council of Associations for Science Education* 15, 3, 225-239.
- Dulamă, M.E., Magdaș, I. and Chiș, O. (2020): Role of Didactic Films Made by Master's Students in Developing Didactic Competence. In V. Chiș (ed.): *7th Edition of Education Reflection Development (ERD) International Conference 2019, European Proceedings of Social and Behavioural Sciences*, 85, 704-712. Doi: 10.15405/epsbs.2020.06.73.

- Dulamă, M.E., Ursu, C.-D, Ilovan, O.-R. and Voicu, C.-G. (2019): Increasing Generation Z Geography Students' Learning through Didactic Films, in University. In M. Vlada et al. (eds.): *Proceedings of the 14th International Conference on Virtual Learning*. Editura Universității, București, 79-85.
- Filme didactice* [Didactic Films], <https://www.facebook.com/search/top?q=filme%20didactice>, accessed 2020.
- Gavrilă, R.-M. and Nicolae, M. (2015): *ABC-ul organizatorilor grafici* [The ABC of Graphic Organizers]. Didactica Publishing House, București.
- Hillaryjbrown (2018): *PowerPoint Mind Map tutorial*, <https://www.youtube.com/watch?v=o7Y2XUY9uCW>, accessed 2020.
- Iuga, R. (2008): *Cum să faci o statistică în PowerPoint* [How to Do Statistics in PowerPoint], <https://www.youtube.com/watch?v=UdA2Z49dPrE>, accessed 2020.
- kalytheo (2015): *Competente digitale 2015 – Desenarea unei scheme logice în word 2010* [Digital Competences 2015 – Drawing a Logical Scheme in Word 2010], <https://www.youtube.com/watch?v=3z5ABH3N5Fk>, accessed 2020.
- Lectii Geografie [Geography Classes] (2020): *Cum creezi o climogramă (grafic combinat - bare și linii) în Microsoft Excel* [How to Create a Climate Chart (Combined Graphic – Bars and Lines) in Microsoft Excel], <https://www.youtube.com/watch?v=yAmHsnMVcw8>, accessed 2020.
- Linkedin Learning (2013): *Word tutorial: Working with SmartArt | lynda.com*, <https://www.youtube.com/watch?v=Y86bhcinaJA>, accessed 2020.
- MindMaster for Mind Mapping (2020): <https://www.edrawsoft.com/mindmaster/>, accessed 2020.
- Net, O. (2013): *Tutorial Excel - 7. Grafice* [Excel Tutorial – 7. Charts]. https://www.youtube.com/watch?v=XnV_T8C6bgM, accessed 2020.
- OnlineTeachers (2020): *Cum să Înveți pentru Examen - Hărți Mentale [Ina Ilie]* [How to Learn for Exams – Mental Maps], <https://www.youtube.com/watch?v=2KhWYhWM6Vk>, accessed 2020.
- Roșian, Gh., Horvath, C., Réti, K.-O., Boțan, C.N. and Gavrilă, I.-G. (2016): Assessing Landslide Vulnerability Using Bivariate Statistical Analysis and the Frequency Ratio Model. Case Study: Transylvanian Plain (Romania). *Zeitschrift für Geomorphologie* 60, 4, 359-371.
- Software Spring (2017): *How to Create Flowchart in Powerpoint | Step-by-Step Tutorial*, <https://www.youtube.com/watch?v=GsfZD4oU7I0>, accessed 2020.
- Steele, J.L., Meredith, K.S. and Temple, C. (1998a): *Lectura și scrierea pentru dezvoltarea gândirii critice* [Reading and Writing for the Development of Critical Thinking], vol. I-II, editat de Centrul Educația 2000+ în cadrul proiectului „Lectura și scrierea pentru dezvoltarea gândirii critice”. București, Cluj-Napoca.
- Steele, J.L., Meredith, K.S. and Temple, C. (1998b): *Promovarea gândirii critice* [Promoting Critical Thinking], vol. II, editat de Fundația Soros și de Institutul pentru o Societate Deschisă în cadrul proiectului „Lectura și scrierea pentru dezvoltarea gândirii critice”. Cluj-Napoca.
- Teachings in Education (2018): *Graphic Organizers | Teaching Strategies # 7*, <https://www.youtube.com/watch?v=uU0v8eFO53g>, accessed 2020.
- The Tech Train (2018): *Create A Mind Map in Microsoft Word Using 3 Little Known Tools*, <https://www.youtube.com/watch?v=5XzFjjOpsR0&t=170s>, accessed 2020.
- Ursan G. (2017): *Cum faci diagrame și grafice simple in Google Sheets* [How to Make Simple Charts and Graphic Organisers in Google Sheets], <https://www.youtube.com/watch?v=yAmHsnMVcw8>, accessed 2020.
- Vlada, M. and Adăscăliței, A. (2014): Computers: as Digital Facilities for Scientific Research and as Tools for Enhanced Learning in Higher Education. *eLearning & Software for Education* 2, 537-544.
- Vlada, M. and Jugureanu, R. (2007): E-Learning Technologies - Achievements and Perspectives. In M. Vlada et al. (eds.), *Proceedings of the 2nd International Conference on Virtual Learning*. Editura Universității, București, 35-46.
- Wdvideoeducation (2020): *Word: How to Create a Flowchart, Mind Map, Web, Learning Map, etc.*, <https://www.youtube.com/watch?v=tZpgeCdbZGQ&t=60s>, accessed 2020.
- Wondershare Edraw (2017): *How to Make Mind Map - Step by Step*, <https://www.youtube.com/watch?v=o78s8eJjkBY>, accessed 2020.
- Wondershare Edraw (2019): *12 Graphic Organizers You Should Know*, <https://www.youtube.com/watch?v=KGj-6f5fo0Y>, accessed 2020.
- Wondershare Edraw (2020): <https://www.edrawsoft.com/>, accessed 2020.