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Video Content as a Tool for Transferring Professional Experience in Digital Logistics

Abstract

It has been proven that multimedia is a tool that can stimulate the assimilation of new material, providing information on a variety of topics and allowing for the realistic reproduction of complex phenomena. It is emphasised that these technologies can be used at all levels of education, from primary school to higher education and professional training courses. The *purpose* of this article is to investigate the effectiveness of video content as a tool for sharing professional experience in digital logistics, and to determine its impact on learning and improving specialist competence. *Methodology.* The methodological basis of the study is the methods of analysis, generalisation and systematisation of scientific sources on the use of multimedia technologies and video content in the educational process. Moreover, the analysis of open empirical data was employed to ascertain the impact of video materials on the effectiveness of training and the formation of professional competencies in the field of digital logistics. *Results.* During the study, it was confirmed that using video expands access to educational resources, enables the organisation of educational activities regardless of time constraints, and creates conditions for the individualisation of the educational process. It was also found that using video as a learning tool promotes active learning and memorisation. Provided that training is carried out using video materials that combine images and audio, the information is stored in memory for longer than if it were obtained separately from audio or visual materials. *Practical implications.* It has been determined that using video in the educational process requires certain demonstration platforms. In distance learning, it is customary to use a universal platform, typically provided by a higher education institution. In other cases, any other available platforms and digital services may be used. *Value/Originality.* When open empirical data was analysed, it was found that perception of video materials depends on individual learning styles – particularly visual, auditory and kinaesthetic – highlighting the need for a differentiated approach to designing educational video content.

Keywords

online learning; innovation; technology; logistics; video learning; digital platforms

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1 Introduction

The integration of contemporary technologies and media within educational paradigms has the potential to reconfigure existing perceptions. Multimedia has gradually become a tool that stimulates the assimilation of new material, providing information on a variety of topics and allowing for the realistic reproduction of complex phenomena. Visual learning is becoming an increasingly important trend in teaching, with new educational platforms and offers appearing that complement educational programmes. Perhaps the greatest value of technology is that it can be used at any level of education, whether that be primary, secondary or higher education, or special professional courses. The active use of new tools undoubtedly contributes to the development of new teaching methods, which requires teachers to constantly improve themselves, thus enriching the offerings of educational institutions. This is a new challenge for educators since using new technologies means revising the content and methods of education. Using videos in which the teacher is both author and presenter requires the development of additional professional competencies in creating, editing and implementing video material for educational purposes. In general, audio and video materials are easier to understand than written materials or lectures. The utilisation of video materials pertaining to a particular subject has been demonstrated to facilitate enhanced learning and retention. Watching video content is generally considered an interactive way of transmitting information between viewer and medium. Viewers form messages based on their own

experiences and expectations in response to what they see on the screen. Educational videos cannot be considered in isolation because, in the context of the modern information society, they are intertwined with many other forms of media and communication, from computers and the internet to digital printing. This makes each educational video a flexible, interactive environment under the student's control, increasing its value as an educational tool.

The relevance and advantage of visual education lies in its ability to touch on the very essence of the educational process. In the logistics sphere, for example, it enables complex logistical processes to be visualised, provides visual practical experience, increases cognitive ability and facilitates the formation of professional competencies. However, it is important to understand that technology alone cannot automatically motivate students to learn. The content itself, and the manner in which it is presented, are also of significance. It is not the technology itself that is important, but the pedagogy – the concept of the educational process, the method of presenting information and the approach to learning – which are all critical elements of this process.

2 Purpose of the Article

The aim of this article is to investigate the role of video content as an effective tool for transferring professional experience in the field of digital logistics, and to determine its impact on training and improving the competence of specialists. The article aims to analyse modern approaches to using video content in vocational education, identify features of transferring professional experience in digital logistics, investigate the effectiveness of various video content formats (e.g., training videos, demonstrations and case studies) in training digital logistics specialists, and determine the advantages and limitations of using video content to develop professional competence.

3 Video as a Tool for Interactive Communication Among Participants in the Educational Process

Regardless of its type or form, the practice of using video in the educational process functions as an integrated educational environment that provides digital interaction between participants and combines traditional pedagogical approaches with Internet technologies (Wang, Sarkis, 2021). Studies have shown that using video expands access to educational resources, enables the organisation of educational activities regardless of time constraints, and creates conditions for the individualisation of the educational process (Hu, Gramling, 2009).

The cognitive concept of multimedia learning, developed on the basis of the theory of cognitive load and the integrated model of understanding text and images, provides a successful explanation of the advantages of learning using video content. According to this theory, three important elements significantly affect the learning process: internal load (the resources of prior knowledge that enable understanding of information and the level of cognitive activity); and external load (cognitive effort). In general, the idea boils down to the fact that there are two channels of information processing: verbal-visual and audio-verbal. Specifically, verbal and non-verbal (visual and figurative). In other words, people actively absorb information entering the brain and process it by generalising, comparing and classifying.

Using video as a learning tool provides both visual and audio experiences, promoting active learning and retention. When learning is done using video materials that combine images and audio, the information complements each other, resulting in longer-term memory retention than when using audio or visual materials alone.

Video materials are most often used in distance learning contexts, such as online platforms offering specialised courses. In Ukrainian pedagogical practice, Zoom, Teams and Google Meet are the most common platforms used for distance learning. In general, it is worth emphasising that the video learning process uses three methods of knowledge transfer: guided learning through instructions, independent learning through actions, and co-operative learning through special chats with reflection and discussion.

In general, video affects the efficiency of knowledge acquisition due to the speed of visual stimuli and the way in which content conveyed through images associated with sound is stored in long-term memory. In order to read text, the brain must first convert it into symbols (such as letters and signs) or images in sensory memory. It then recodes this information in working memory before it enters long-term memory.

In logistics, transferring experience is particularly important. This can be achieved by recording production processes on video, enabling practitioners to demonstrate professional task algorithms and ensuring the integration of theoretical training with applicants' practical activities (Wu, Huang, 2013). It is also important to model situations, analyse practical cases and study professional mistakes (Bykov, Spirin, Pinchuk, 2020). Video materials can demonstrate the behaviour of experienced drivers and the peculiarities of their decision-making in crisis situations (Miller, Maricle, 2019). Video helps people to understand the importance of standardising certain procedures and provides a constant opportunity to learn by analysing previous experience. Other important elements of logistics include observing production, transport and warehouse processes;

using specialised transportation equipment; and studying digital control systems. However, it is worth bearing in mind that video-based training is most effective at the initial training stage. Combining video with practical activities in a real production environment helps to develop the professional skills needed for more complex logistics operations (Sadovyi, Somenenko, Ostrovskyi, 2022).

Based on the above, several important criteria can be identified for videos used for educational purposes within the learning process. These include the audio component, namely the use of the teacher's voice, music and sound effects for instructional support; the presence of visual elements, such as slides, graphics and video sequences; and the inclusion of textual components, including subtitles, captions and explanatory notes. Additional criteria involve the nature of learner interaction with the video through activities, exercises or response tasks; the style of video production, including artistic design, pacing and presentation format; and the overall instructional design, which determines the organisation of the video lesson for effective knowledge acquisition. Effective educational video content therefore requires consideration of multiple dimensions, ranging from technical aspects, such as sound and visual quality, to pedagogical factors, including instructional methods and learner engagement.

4 The Practice of Using Video for Educational Purposes

Using video in the educational process requires certain demonstration platforms. If we are talking about distance learning, the educational institution usually offers a universal platform for its students. In other cases, any platform that is convenient for teachers and students can be used in the educational process. Thanks to the rapid development of digital platforms, these can today include various online platforms, podcasts, blogs and social networks (Wiechetek, 2018).

Each platform has its own specific uses. For example, video is considered one of the most popular types of content on Facebook, particularly when it comes to videos that have been uploaded separately. Reels are ideal for creating short, entertaining or informative videos. This is an additional way to attract the audience's attention. Reels can be edited with various effects and music, or one can use original audio tracks. Reels are also used on Instagram. Thematic video blogs are also quite popular. In the context of logistics, video blogs can be useful for learning and observation purposes, especially if the material is presented in diary form. Taking into account analytical data, YouTube is generally considered to be the most popular platform for learning. It allows one to search for videos, create an account, watch videos and download them. With 2.9 billion active users, YouTube is the second most popular site after Google. In Ukraine, YouTube is also the most popular social network: at the beginning of 2026, it had 23 million users, while TikTok and Instagram occupied second and third place with 21.54 million and 13.24 million users respectively (Ranking of the Most Popular Social Media Platforms Among Ukrainians: YouTube and TikTok Take the Top Spots, 2026).

A significant advantage of using digital platforms, including social networks, is that they are virtually accessible anywhere in the world and support multilingual interfaces. It is also worth emphasising that Internet platforms can be used by both organisations and individuals. Today, there are many examples of successful individual educational projects and blogs (Navarrete, Nehring, Schanze, 2025).

Modern video editors have significantly simplified the process of creating educational videos and

TABLE 1 Mechanisms for transferring professional experience through video content in digital logistics

No.	Mechanism of using video content	Content of the transfer of professional experience	Practical educational outcome
1	Overview of production processes	Visualisation of algorithms for drivers' work in difficult road conditions, warehouse operations and the use of logistics equipment in accordance with transportation safety procedures. Recording the sequence of professional actions, behavioural models and typical errors.	Acquiring professional skills, abilities and competencies.
2	Transfer of informal professional experience	Analysis of real, practical logistics cases.	The dissemination of informal professional knowledge for the purpose of transferring experience.
3	Modeling professional situations	Hypothetical cases are simulated, taking into account high-risk conditions.	Acquiring professional skills, abilities and competencies in high-risk conditions.
4	Lifelong learning	Access to videos and educational materials is free.	Implementing the concept of continuous education.
5	Analysis of professional activity	Video analysis of errors in decision-making and professional activities.	Improving the quality of professional training.

Source: compiled by the author based on the material

transferring professional experience in the field of digital logistics. One such accessible and convenient tool is CapCut, developed by ByteDance (2026). CapCut's functional capabilities, particularly its support for multi-layer compositions, enable the combination of video fragments, audio materials, text explanations, and graphic elements. This contributes to the creation of educational videos that are both content-rich and methodically structured.

Using built-in templates and visual effects streamlines the editing process, creating opportunities to quickly prepare educational materials that reproduce production processes, technological operations and professional algorithms in logistics. Using these tools helps to streamline professional experience and its visual representation, and increases the effectiveness with which practical knowledge is transferred between practitioners and students.

Scientific research indicates that web-based educational environments positively impact learning quality, promote communicative interaction between teachers and students, and increase learning engagement (Johnson, Hornik, Salas, 2008). Using digital educational resources also makes the learning process more flexible, as it allows students to independently determine the pace and intensity of their knowledge acquisition (Liaw, Huang, Chen, 2007).

At the same time, researchers also draw attention to a number of challenges, including difficulties with the independent organisation of educational activities, an insufficient level of educational motivation and difficulties in adapting students to autonomous learning conditions (Hu, Gramling, 200). Some studies demonstrate that using web technologies does not necessarily improve learning outcomes, as the effectiveness of the educational process depends on high-quality methodological and pedagogical support (Sadovyi, Somenenko, Ostrovskyi, 2022).

The production of an educational video requires teachers to possess competencies encompassing both digital tool proficiency and the ability to design the educational process scientifically. However, there is an urgent need for more specialists who can create educational materials that meet the content, methodological and technological requirements of specific subjects (Alonso, Faus, Riera, Fernandez-Marin, Useche, 2023).

An educational video becomes effective when it encourages active cognitive interaction between students and educational material. To this end, it is advisable to introduce interactive components such as test tasks, surveys, simulation modules and practice-oriented exercises. These not only provide control over knowledge acquisition, but also facilitate the development of professional skills. The effectiveness of an educational environment in which video is the primary teaching tool depends on a number of factors, including the psychological characteristics of the students, the organisational structure of the educational process, and the level of interaction between its participants (Liaw, Huang, Chen, 2007).

Empirical studies show that perception of video materials depends on individual learning styles – visual, auditory and kinaesthetic in particular – highlighting the need for a differentiated approach to designing educational video content (Miller, Maricle, 2019). Considering different cognitive strategies for processing information increases the adaptability of educational materials and ensures they meet the needs of different groups of learners. Additionally, the effectiveness of video use is associated with the specifics of educational content; digital educational environments demonstrate increased efficiency in mastering the theoretical provisions and factual information that form the basis of declarative knowledge, creating the prerequisites for their subsequent practical application (Maliuga, 2024).

In order to assess the effectiveness of video use in the educational process, a comprehensive analysis of academic achievement indicators, the level of self-efficacy, and the degree of satisfaction of students with the organisation of training is required (Bykov, Spirin, Pinchuk, 2020). Within the domain of vocational training, particularly in the logistics sector, video content has the potential to function as a pedagogical tool, enhancing the quality of the educational process, contributing to the development of professional competencies, and fostering motivation to attain the relevant qualification.

5 Conclusions and Prospects for Further Research

Thus, visualising educational content is a conceptually significant component of the modern educational process as it directly affects the mechanisms of knowledge acquisition and the development of professional skills. In the context of training logistics specialists, using video materials provides an opportunity to reproduce and present complex logistics processes visually, as well as modelling technological operations and professional activity algorithms. This helps bring learning closer to real professional practice conditions. This, in turn, increases the cognitive engagement of learners and the effectiveness with which they acquire professional knowledge. At the same time, it is worth remembering that the effectiveness of using video for educational purposes depends directly on the professional training of pedagogical workers, particularly their ability to combine digital tools with scientifically based didactic design. Therefore, the topic of using video materials as educational content remains particularly relevant and promising.

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