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**Review research paper** 

# VIDEO TUTORIALS AS POTENTIAL ALLIES IN ESP CLASSROOM

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Abstract. The use of video materials as teaching aids in ESP courses has been advised and widely practiced by ESP scholars for decades. In the highly technologically developed and networked world of today which has given rise to a cyber culture and on-line education, video tutorials have emerged not that long ago as a platform for sharing knowledge on various scientific, professional and every-day topics. Bearing this in mind, the paper has an intention to explore how technical video tutorials can be used in ESP classroom with technology students. In view of promoting the deep learning strategy which insists on implementation of digital technologies in the 21st century education, this paper will pinpoint the effects of technical video tutorials on the learning process in ESP settings, observe student reactions to guest tutors and their short video-lectures, and analyze some of the outcomes of this type of instruction.

Key words: video tutorial, ESP, deep learning strategy

#### 1. INTRODUCTION

Digitalization in the 21<sup>st</sup> century has brought a wide range of opportunities for learning, making the internet a legitimate source of information and materials to study from. Video tutorials, for instance, are continuously being created and uploaded on the internet due to an ever present need to share information with the goal to instruct, give advice, or provide solutions. This kind of video content is readily available and followed in households out of an urge to collect more knowledge on various topics.

There are many different forms that video tutorials can take. They can be made in the format of screencasts or screen recordings, audio files, written documents, or interactive videos in which the tutor and the viewers establish a special bond based on the same interests, or a shared problem. The fact that video tutorials not only provide original content to the viewers, but also make a strong visual impact on them, positions them high on a scale of effective teaching materials which contribute to the efficacy of learning.

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#### 2. IMPORTANCE OF VIDEO MATERIALS IN ESL

Video materials have been used in language tuition since the 1970s and many studies conducted in the meantime have proven the effectiveness of *videos* in teaching English as a second language. However, the effects of *video tutorials* still need to be thoroughly examined, especially in the area of ESP where they could be put to the greatest usage; therefore, this paper can be seen as one of the attempts to come to certain conclusions on the application of video tutorials as teaching aids in the context of ESP.

So far, studies have shown that videos can be a great motivation to students, triggering their attentiveness and enthusiasm for language learning. Hansch et al. (2015) support this thesis by stating that online learning videos *build rapport* and *motivate learners*, which is achieved by providing a meaningful content and context that is related to real-life experiences. Ultimately, videos "help students in gaining confidence as they repeat and imitate real models using the target language" (Radosavlevikj and Hajrullai, 2019: 183).

Besides their motivational role, videos make the learning process easier and more effective by clarifying sometimes very complex concepts though visual cues they provide. As Hick, Hughes and Stott (2011: 96) see it "the total context includes paralinguistic, linguistic and physical environment", therefore, the meaning is conveyed not only through the words, but also through the use of symbols, signs, gestures, sounds, and actions. Choi (2015: 23) points out that this means of instruction can "assist learners in interpreting the listening scripts by using all those non-verbal aspects of communication", making listening and comprehension tasks much more manageable.

All this leads to a better retention of the study material as Cruise (2007: 6) indicates, claiming that "the mix of spoken language, text, still images and moving images in television and video results in higher learning gains". His further findings show, for instance, that more than 50 percent of video content viewers actually use new vocabulary as a result of watching a video, which sheds light on videos as valuable language banks making language more memorable and ready for use. Similar studies, done by Lloyd and Robertson (2012), reveal that students tend to achieve better test results when being instructed through video sessions than by being exposed to textual tutorials.

Speaking in favour of video usage in the EL classroom, Radosavlevikj and Hajrullai (2019) emphasize the importance of video materials in teaching different types of EL learners. Since videos have an impact on different senses at the same time, visual-spatial learners can benefit from the presented images, auditory-sequential students from the sound and the speech recordings, whereas individuals that rely on tactile-kinesthetic strategy can learn through demonstrative actions displayed in videos. This way individual learning styles are taken into consideration, which can be especially important in an ESP classroom settings, since such classrooms are quite often heterogenous. Constantinou and Papadima-Sophocleus (2020: 18) stress that in ESP classrooms, technologies "become a source of authentic materials, opening a window to the world and exposing the learners to real life language use in their specific disciplines". Thus, it is possible to view upon video tutorials as tools that can cater the needs of different learners coming from different learning environments with different level of preknowledge, ensuring that each individual gets a proper stimulus for the learning activity in the context of authentic specialized language.

A very good platform for promoting the usage of digital tools in education, and especially in ESP classes, is a deep learning strategy. This is a teaching method which ensures "learning through discovering and mastering existing knowledge and then creating

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and using new knowledge in the world" (Fullan and Langworthy, 2014: 21). It advocates for developing technological literacy in learners, intending to grant them full digital citizenship; therefore, it sees technology as an enabler and accelerator of learning. In the context of deep learning, "technology directly supports the new learning partnerships and it becomes the foundation of deep learning tasks" (Fullan and Langworthy, 2014: 32).

Not surprisingly, VanderArk and Schneider (2012: 13) point out that deep learning and digital learning are, in fact, compatible as means of instruction, so that deep learning can also take benefits on several grounds such as "personalized skill building", "schools and tools", and "extended access and expanded options" through the capacities that digital props provide. The same authors mention that it is through this synergy that student "success factors such as engagement, motivation and persistance" can be increased, which is one of the main reasons why the video tutorial research to be presented in this paper was theoretically and methodologically grounded in no other, but the deep learning strategy itself (2012: 26).

#### 3. IMPORTANCE OF VIDEO MATERIALS IN THE CONTEXT OF DEEP LEARNING

Deep learning as one of the prominent learning strategies in the 21<sup>st</sup> century insists on the usage of digital resources for teaching purposes, out of an awareness that learners should be made digitally literate and capable of implementing technology for the studying benefit. The utmost goal of this way of instruction is to create highly competent individuals equipped with a full set of skills, both content and career oriented, which are needed by the labor sector.

In practice, deep learning actually requires a skill of adaptation to the new learning contexts, by relying on pre-knowledge and already lived experience. This said, it is clear that many learning opportunities and platforms should be created by teachers to motivate learners develop "survival skills" in the new, unexplored territories of knowledge. In particular, this implies the usage of online platforms, sources and formats, making video tutorials a suitable resource in this respect.

Through the lense of deep learning, technical devices and digital contents can just foster learner autonomy and responsibility for the process of learning, since this educational system allows lerners to develop skills and gain knowledge at their own pace, following their own interests and needs. Motteram (2013) points out that digital technologies help teachers work with learners, but also make learners very active in *languaging* through their independent work on the web-based content.

Taking into consideration the said principles of deep learning, and promoting this trend of learning in the area of higher education, an ESP research has been conducted among the freshmen of Road Traffic and Industrial Engineering departments at the Academy of Applied Technical and Preschool Studies in Niš. The study involved 20 students from each department who took part in four workpackages: 1. completion of an innitial questionnaire designed to investigate student attitudes towards video tutorials in general, 2. implementation of a specific ESP video tutorial project, 3. completion of a feedback questionnaire meant to explore student preferences in regard to the video tutorial project, and finally 4. oral examination about the topic presented in tutorials.

#### 4. THE VIDEO PROJECT OUTLINE<sup>1</sup>

# 4.1. Initial phase

Primarily, it was important to check if the students had any previous, out of the classroom experience in using tutorials, so as to see how versed they were in using such visual materials. For this purpose, a student questionnaire comprising 10 questions was prepared and distributed by the teacher at the beginning of the project. The aim of the initial questionnaire was to collect data on how students perceive tutorials, that is, whether they see them as materials they watch for fun, as potential tools which can be used in self-education, or as a combination of both.

The frequency of watching tutorials was a significant aspect for analysis too, based on a presumption that exposure to such visuals could have had a substantial impact on developing ESP skills. The longer hours students spent watching these materials online, the more they were exposed to the English language and in contact with specific terminology of ESP, which could offer them an opportunity to accumulate linguistic competence in their specific professional field.

To support the research further, the attitude of students in regard to trustiness and authenticity of tutorials as educational resources was taken under scrutiny as well. The fact that students trust tutorials and value them as a reliable source of information could also provide an insight into their habits as users of tutorials and indicate to what extent they were ready to rely on this kind of materials in their learning processes.

Related to this, it was also necessary to determine which criteria the students themselves were using for assessing the quality of video tutorials. Therefore, they were given a list of assets to choose from (by circling one or more options) such as the picture, the sound, the content, the text, or the overall feel of the visuals.

In addition, the students had to self-evaluate their own English language skills pertaining to tutorials. On the one hand, they were to assess how difficult it might be to follow this type of content and understand it. On the other hand, they had to state if they could benefit from tutorials, in terms of gaining language skills and/or broadening perspectives in their field of study.

Last but not least, the questionnaire was set to investigate creativity in students as far as the production of their original content in the form of video tutorials was concerned. For this purpose, they had to identify strengths and weaknesses regarding both their inner technical and language apparatuses, and come up with an outline for their professional tutorial, which could be developed as a follow-up activity to this project.

# 4.2. Project task

The focal stage of the project was conceptualized upon watching three different video tutorials on forklift operation. This specific topic was selected with the reference to the curriculum for Road Traffic and Industrial Engineering study programs and in alignment with the students' real-life experience as B category drivers. To operate a forklift requires skills that B category drivers do not gain when taking their driving lessons. However, forklift operation is similar enough to driving a car, which could inspire interest in

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<sup>&</sup>lt;sup>1</sup>Video tutorial project outline can be accessed at the following link https://www.vtsnis.edu.rs/predmeti/poslovniengleski-jezik/

students and provide a sound foundation for building up knowledge on the driving activity itself. This way the students were asked to rely on their previous knowledge and skills, and use this asset in the new learning environment, which is one of the core principles of the deep learning strategy.

The first video (*Forklift training-basic operations*, <u>https://www.youtube.com/watch?v=fc0JWk19Z7I</u>) was the longest and linguistically most demanding one, but at the same time it served as a proper introduction to the topic. The goal of this particular activity was to make students listen for details, pick up the important language such as words, terms and phrases, and utilize the specific language in context to produce meaningful answers. The idea behind this activity was to strive for a linguistic boost and to gain a theoretical input on how to drive such vehicles.

A practical dimension to the project, which could indicate to what extent the students actually understood the instructions on forklift operation in English and how successfully they could apply them in real life, was left out from the research out of objective and safety-wise reasons. The higher education institution where the research had been conducted, did not have any forklifts in stock, nor could it possibly organize a training with the third party involving so many students, incorporating all the safety regulations that had to be met in order to implement a risk-free practical driving test.

However, after watching the first video tutorial, the students were equipped with substantial theoretical knowledge on how forklifts operate, since the first video explained all the actions performed by the fork lift (FL) operators in great detail. This included information on driving instructions, safety-tips, rules for loading and unloading the pallets, vehicle maintenance checks, etc. This helped in fostering language confidence, which was further on embedded through a set of ten comprehension questions that the students had to respond to.

The second video (*Crown 5500 controls tutorial*, <u>https://www.youtube.com/watch?v=G7D3a dLmJI</u>) was a tutorial on the use of a special mark of a fork lift vehicle, that is Crown 5500. Some of the instructions given here differed from the ones the students could get in the previous video. Therefore, this activity was useful for developing analytic skills in students, through the process of comparison and contrast where students could make inferences on different types of fork lift vehicles. The second video was accompanied by 5 comprehension questions, since it was much shorter in length than the first video tutorial.

The third video (*Lift-reach truck training*, <u>https://www.youtube.com/watch?v=</u><u>PfMGYnTdahw&ab\_channel=LIFTTraining</u>) was not focused on performances of fork lift vehicles, although some additional features in this respect were revealed, such as displaying data on the control panel, but it was more informative on the driving skills that could be gained through practical training. The students could see what kind of drill the fork lift operators should get and the specific tasks they had to do, like avoiding physical obstacles in their way, driving in reverse, going in between the road markings, etc. This particular video helped students learn not only about the technical specifications of FLVs, but also about the skills needed to operate them by observing the real actions exhibited by the FL operators. The last video was accompanied by 4 comprehension questions; therefore, the students had 19 questions in total to complete for their homework assignment, which was a very extensive writing exercise to do, and a very good way to promote writing skills and expand a word bank in the domain of specialized language. Since *writing* is seen as one

of the principal language activities in deep learning, it has been widely used here to ensure the success of the process of learning.

#### 4.3. Post project phase

In order to analyze the level of student compliance and satisfaction with the set project activities, a feedback questionnaire was administered to them and collected after completing the video tutorial assignment. The purpose of the feedback was to find out which one of the three video tutorials was most suitable for learning English and improving ESP skills from the students' point of view.

The students were invited to evaluate the quality and the appeal of tutorials, express their emotions towards them, rate the performance and skills of individual tutors who appeared in the videos, and single out the video that was most useful, interesting, professional and self-explanatory of them all. Also, they had to state their opinion on the overall project, by giving their votes for or against video tutorials as potential means of instruction in ESP classes.

# 5. RESEARCH FINDINGS

#### 5.1. Initial questionnaire

The analysis of the initial questionnaire has shown that students from both RT/IE departments take a very similar stance on video tutorials. Namely, the majority of students in both groups stated that video tutorials are, above all, proper educational tools for them. The students also suggested that tutorials are useful when wanting to learn something new, and that they are a good source of information to be collected on their field of study. Bearing this in mind, video tutorials can be seen as treasuries of various types of knowledge to dive into when one feels a need to gain knowledge on matters of his/her interest. Therefore, if students were ready to use tutorials at home to satisfy different educational needs, there is no reason they would not be using them more often in the classroom. Extensive research in this area has already proven in practice that videos can inspire interest in studying, clarify the content, and introduce professional topics which would otherwise be difficult to grasp without the use of such visual props.

In regard to reliability of video tutorials, both groups of examinees expressed a certain amount of doubt in the accuracy of such online sources, which indicates that students as viewers do take caution when accessing web content, finding it reliable, but only *sometimes*. The fact that students seem to be reserved towards video tutorials is seen here as the reflection of their sharp critical sense capable of choosing good from bad material, and an urge for watching high quality content that can offer meaningful, checked and verified information on professional topics.

Agreement was also achieved by both samples as it comes to the quality of the selected video materials. It has been concluded by both groups that a video tutorial must include not one, but all of the following aspects, that is, high quality picture, sound, content and text, in order to be considered a good web product. Therefore, the expectations of students from video tutorials seem to be high and most likely based on the need to hear and read some good English, and find out relevant information on the subject matter of their study.

Both RT and IE students think that watching video tutorials is a good way of learning English and claim that they do not experience any difficulties in understanding the content, showing that their receptive language skills are well-developed for this kind of activity.

However, although the students agree that making a professional video tutorial on their own would be a creative task, the lack of content knowledge in RT students, that is, inadequate English language skills in IE students, is something that would slow the process down and make it difficult for them to handle the task, according to their own self-assessment. In view of improving the chances for a success of such a project, some extra work then would have to be done on the part of the teacher in order to boost confidence in them as learners, and this would ask for more practice in the area of productive skills. Good writing and speaking in English, but also a proper command of computer skills in making and editing videos, would be the key competencies to target. This would definitely require more practice in ESP classes as well as within their IT courses.

A slight departure in results has been noticed only pertaining to the frequency of watching video tutorials. Whereas the RT department students tend to watch more tutorials and do it on a daily basis, students from the IE department access such materials less often, but still do it every week. However, this is substantial evidence to claim the popularity and attractiveness of the video tutorial format among the young generation, which should be taken as an advantage by teachers who struggle having their ESP class attentive and active enough throughout the course.

In addition, it could be seen that video tutorials really could inspire creativity in some students, who came up with presentable ideas for their own content. The Road Traffic students, for instance, thought of videos that could speak about traffic safety, different types of vehicles and their performances, or the rules for cyclists in traffic and the reasons why cycling should be promoted as an activity. On the other hand, the students from the Industrial Engineering department followed their own interests and mentioned possible videos on PC parts, laboratory equipment and instruments, driving maneuvers on vehicles and the like. Other ideas were given as well, but they were a bit vague or too general, speaking about non-professional topics.

All the above-mentioned suggests that video tutorials with their expected positive effects on students could be used as teaching tools and incorporated in the ESP syllabus, especially given the needs of students as learners and their positive attitude to video lesson formats.

# 5.2. Main project task

The results of the central stage of the video tutorial project have revealed a great amount of dedication and devotion on the part of students, who took the activity seriously and invested themselves a lot in completing it. Students' answers to the comprehension questions, as it turns out, are concrete, elaborate and precise, with accurate wording and sentence structure, so there is no evidence of misunderstanding the content in any way. It should be admitted though that one of the significant factors influencing the students' performance here could have been the fact that the students did the project at home, without any time-constraints, meaning they could pause, rewind, replay and re-watch the materials as many times as they wanted, thus soothing their individual needs as learners.

A tendency to copy chunks of the text from the video titles was noticeable upon several occasions, but this does not have to be seen as a flaw to the project, given different capabilities

of students as language users, some of them being at a higher, some of them at a lower level of ESP aptitude. Since each video tutorial has an incorporated textual support in English, students could both read from the videos and listen to them, this being a learning strategy with a multiple effect on their senses, and possibly a strategy that might have eased the process of learning for them.

In addition, the consistency of the topic throughout the video tutorials and a lot of repetition of the subject-specific language, also had an important role in clarifying the study material, and thus on retaining it more easily, as it was proved later during the oral examination. The students were assessed not only based on their writing skills obtained through the video tutorial project assignment, but also based on their spoken communication when asked to defend orally their video projects as part of the final exam. Even after the time elapsed, the students could remember the content, the language and the structures from the videos, as it was exhibited during the interviews with the teacher, when they showed a very good command of specific terminology and the topic in general, the ability to compare and contrast the videos, and identify different features of FL vehicles.

#### 5.3. Feedback questionnaire

Feedback from the students received upon completion of the video project gave significant findings to the teacher that could be used for selecting appropriate tutorials for future instruction in ESP classes. Namely, all three videos covered the same topic, but not all of them were created in the same format, which could also have had a different impact on students as viewers and receptors of the video content. Since the teacher is not an expert in the field, such findings could be quite useful coming from students who are trained to become professionals in the field.

This study actually shows that students from both groups of examinees singled out the first and the third video as the most interesting, the first one also being considered the most professional, whereas the second video was rated as boring by the RT students and the least professional by both groups.

Based on this, it can be concluded that video materials which lack a pragmatic aspect to themselves and are not demystifying of how certain operations are done in practice, are not that well received nor understood by the learners. This is because they rely on a static picture and the talk of a narrator/tutor who is hidden behind the camera. For this reason, the second video was also rated as the least understandable one, apart from being boring and unprofessional.

On the other hand, students' reaction to the third video in which it is possible to see the tutor perform the actions and hear him talk giving plenty of information, was much better, and almost as good as the reaction to the first video. In the first video, one can see the actions performed by a third party and hear the expert narrator who leaves the impression of being highly-competent, well-informed, and skilled in the subject matter. The tutor from the first and the tutor from the third videos were rated as persons of trust and those who provided the best explanations as mentioned by the RT and IE students respectively. RT students selected the first video as the most useful one, but were more in favor of the third video in terms of likeability. On the other hand, IE students thought that all three videos were equally useful, but opted for the first video as the one they liked best.

The final remark of students on the project itself and tutorials as educational means turned out to be positive and highly supportive of the methodology used, as the findings of the feedback questionnaire indicate. RT students have noted that the video project was useful and interesting, but at the same time quite challenging, being perceived as a bit harder activity than their usual ESP tasks. As they have stated, the project was an interesting new way of learning English, but at the same time a good way for getting familiar with professional topics through theoretical and visual instructions.

The IE students were a bit scantier in giving comments, but they still spoke in favor of the project and the video tutorials stating that they could be seen as useful means for studying ESP, stressing the importance of the native tutor's language skills as a decisive factor in the process. This group of students expressed their strong belief that visuals (pictures and videos) provided to support the ESP lesson, could make learning much easier and more long-lasting.

#### 6. CONCLUSION

According to the sources on Wikipedia, a video tutorial is "a method of transferring knowledge and may be used as a part of a learning process. More interactive and specific than a book or lecture, a tutorial seeks to teach by example and supply the information to complete a certain task". So, if not entirely, at least partially, tutorials could be used for educational purposes in order to obtain relevant professionaly-oriented information, or master problem-solving techniques for a specific professional challenge.

Bearing this in mind, tutors, as experts in the field, might be seen as persons with the potential of becoming "guest lecturers" in the English for Specific Purposes (ESP) classroom, giving detailed explanations on specific professional topics and demonstrating how to apply expert knowledge in real life situations. This is especially important given the fact that ESP teachers do not possess the same level of content-based knowledge and skills.

However, the role of the ESP teacher does not necessarily have to be diminished in this kind of a teaching construct; on the contrary, the teacher is still needed by students to select appropriate video tutorials, prepare accompanying language activities for this type of instruction, observe learning outcomes, provide both lingustic and technical support, give feedback on students' work, and perform the assessment.

This way, a good cooperation can be achieved between an ESP teacher and the tutor who is an expert in the field, provided that a video tutorial is authentic, and that the tutor him/herself is native in English, since these preconditions do ensure not only the transfer of professional knowledge to students, but also the transfer of important language skills to them as learners of a specialized discourse in ESP.

The study presented in this paper has confirmed the efficacy of using video tutorials in the context of ESP tuition, through both written and spoken learning outcomes achieved by students on a selected professional topic. As it turned out, the project task was both challenging and motivating for learners, making them more invested in the process of learning, which resulted in their competency to use the specialized language to speak and write with fluency. Besides, the video material used in the project was creative enough to inspire students for making outlines for their original video contents, which has revealed a potential of video tutorials for creative purposes as well.

Moreover, the study showed that students appreciate the type of video tutorials with both a narrator/tutor and a demonstrator, that is the person who performs the actions, since this kind of video material not only provides a theoretical input, but also reveals

some of the practical operations that are of interest to students who can also learn by observing these actions.

All in all, exposing students to video tutorials had a positive effect on their language skills, but also proved that such visual instruction is well received, which is an additional reason why video tutorials, having the power to make learning more interesting, should become an indispensable part of any ESP syllabus.

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