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Interactive Videos in Foreign Language Instruction: A New Gadget in Your Toolbox*

Yabancı Dil Eğitiminde Etkileşimli Videolar: Takım Çantanızda Yeni Bir Alet

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Abstract: The use of videos in education has a long history, and there are a number of ways, in which they can be used in teaching and learning languages. Developments in digital technologies now add to this versatility in language education. One such development is the use of interactive videos. However, interactive videos are rarely used in instructional contexts despite their potential benefits. A possible reason for this is that this innovative tool is hardly known in the field. Therefore, this study discusses the potential affordances of adding interactivity to video lectures or any video that can be used in a language classroom. Once equipped with interactive elements, videos can function as instructional tools by fulfilling various functions, such as assessing students formatively, providing them instant feedback, checking if students view videos at home for a flipped class, teaching vocabulary items in context and holding discussion sessions by using videos as an input. In addition, interactive videos can be used to monitor student responses to questions and their video-watching behavior through the use of analytical tools that most interactive video platforms offer. Keeping such benefits in mind, this study reviews major tools used to add interactivity to videos on YouTube or similar platforms and compares them with respect to various criteria, such as the amount of interactivity provided, cost and so forth. In addition, interactive video tools are examined from a critical perspective with a focus on major benefits and drawbacks.
Keywords: Interactive videos, learner engagement, learner analytics, tracking, feedback

Öz: Videoların eğitimde kullanımı uzun bir geçmişe sahiptir ve videolar çeşitli şekillerde dil öğretimi ve öğreniminde kullanılmaktadır. Dijital teknolojilerdeki gelişmeler dil eğitiminde videoların işlevselliğine katkıda bulunmaktadır. Bu gelişmelerden biri etkileşimli videoların kullanımıdır. Ancak potansiyel faydalarına rağmen etkileşimli videolar eğitim ortamlarında nadiren kullanılmaktadır. Bunun muhtemel nedeni alanda bu yenilikçi aracın yeterince tanınmamasıdır. Bu nedenle bu çalışma video derslerine veya çok çeşitli amaçlarla dil sınıflarında kullanılabilecek videolara etkileşimli unsurlar eklemenin olası katkılarını ele almaktadır. Etkileşimli unsurlar eklendiğinde, videolar; biçimlendirici değerlendirme yapma, anında geri bildirimde bulunma, tersine döndürülmüş bir derste öğrencilerin evde videoları izleyip izlemediklerini takip etme, sözcükleri bağlam içerisinde öğretme ve videoları girdi olarak kullanmak suretiyle tartışma seanları organize etme de dahil olmak üzere çok çeşitli işlevleri yerine getirebilirler. Buna ilaveten etkileşimli videolar; çoğu etkileşimli video aracının sunduğu analiz araçları sayesinde video içeriğine dair sorulara öğrencilerin verdiği cevapları ve öğrencilerin video izleme davranışlarını izlemede kullanılabilir. Bu faydalar bağlamında, bu derleme çalışması YouTube ve benzeri platformlarda yer alan videolara etkileşimli unsurlar eklemede kullanılabilecek belli başlı araçları gözden geçirmekte ve sağlanan etkileşim düzeyi, maliyet vb. ölçütler ışığında bu araçları karşılaştırmaktadır. Ayrıca etkileşimli video araçları başlıca faydaları ve eksik yönleri açısından eleştirel bir bakış açısı ile ele alınmaktadır.
Anahtar Kelimeler: Etkileşimli videolar, öğrenci katılımı, öğrenci analizi, izleme, geri bildirim

Introduction

Videos have long been used in educational contexts, and the introduction of online video platforms has helped videos become a part of everyday instructional practices, making it a popular content delivery tool. In line with the popularity of videos among Internet users, video

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sharing platforms have enjoyed an upsurge of popularity in recent years. YouTube, for example, ranks the second most popular site (Alexa, 2016), and asynchronous video platforms with content for educational purposes, such as Khan Academy, Coursera and Udemy, are getting more and more popular.

The popularity of such sites confirms that instructional video seems to be an attractive learning tool. However, although video sharing platforms house literally countless videos on any topic, they do not guarantee learning and engagement (Mullaney, 2015; Stigler, Geller, & Givvin, 2015). As Clothier (2013) claims, although digital videos are perfect tools for learning and they might be engaging, watching a video is basically a passive activity that "reflects the lecturer model of learning" (para. 14). Today, despite a huge amount of video content on video platforms, the problem of how to use them for effective learning remains unsolved. One solution for this problem, as some educators (Edudemic Staff, 2014; Janzen, 2014) suggest, might be the use of interactive video tools. Video platforms do not allow their users to get involved in collaborative conversations on the topic of the video (Agarwala, Hsiao, Chae & Natriello, 2012), except for the comment feature of popular video platforms like YouTube.

Interactive videos, on the other hand, seem to have the power to transform how educators and learners use videos to learn new stuff. Supported with embedded quizzes and detailed learner analytics, interactive videos are to be one of the most functional tools in language instruction. With lots of additional components, interactive videos function like a container. This makes them more like a web page which houses various information about a topic. Traditionally, videos are presented in web sites on the Internet. Interactive video reverses the situation, making videos and other content interconnected. The evolution of digital videos into interactive videos resembles that of websites from static web pages to Web 2.0. As with Web 2.0 elements, users of this new generation of videos can interact not only with the creator of the video but also with what is inside the video. With lots of additional elements, interactive videos actually seem to be a good tool for teaching and learning in general and seem to lend themselves to language instruction.

Although interactive videos have been in use for a quite a long time, they have not received much interest in instructional settings (Clothier, 2013). This equally goes with language instruction. This is probably because common interactive video tools are not familiar to most language instructors. Therefore, this study provides a brief overview of these platforms as a relatively new tool that could be used for various instructional purposes. It sets out to compare and contrast major interactive video tools to help language educators in their choices. In addition, it also discusses potential uses of interactive videos in language education.

Background information

Earlier examples of interactive videos were marketed in the form of CDs and DVDs and they worked offline on a computer, and their level of interactivity changed from one video to another. The term *interactive video* in the context of distance education referred to "a video delivery system capable of full two-way audio and video interconnection between two or more sites" (Lehman, 2006) (para. 1). Today, interactive video tools are software, usually working through a user-friendly online interface that helps the user to enrich the video by adding questions and other components, such as images, text and links to other sources. Some popular interactive video tools are frequently being used for educational purposes (e.g., EdPuzzle, PlayPosit and Zaption), while some others seem to be more popular in advertising (e.g., Rapt Media).

Interactive videos are quite different from their traditional counterparts as they include interactive elements, prompts which the viewers are asked to respond to and feedback that they can get for their responses (Stigler et al., 2015). They are augmented or enriched versions of digital videos as they contain such additional elements as various types of questions embedded within the video, links to external content, additional instructional tools like instant answers and user statistics that could be used for monitoring purposes and so forth. They make it possible to insert additional content and lots of guidance in the video, introducing interactivity into

traditional lectures. They engage viewers as they not only watch the video but also answer questions, respond to comments or have access to external materials. Another significant difference is that the creator of the video can monitor viewers' progress towards an objective by using data from the videos, such as answers to the questions, responses to the comments and detailed statistics about video watching behavior (Figure 1).

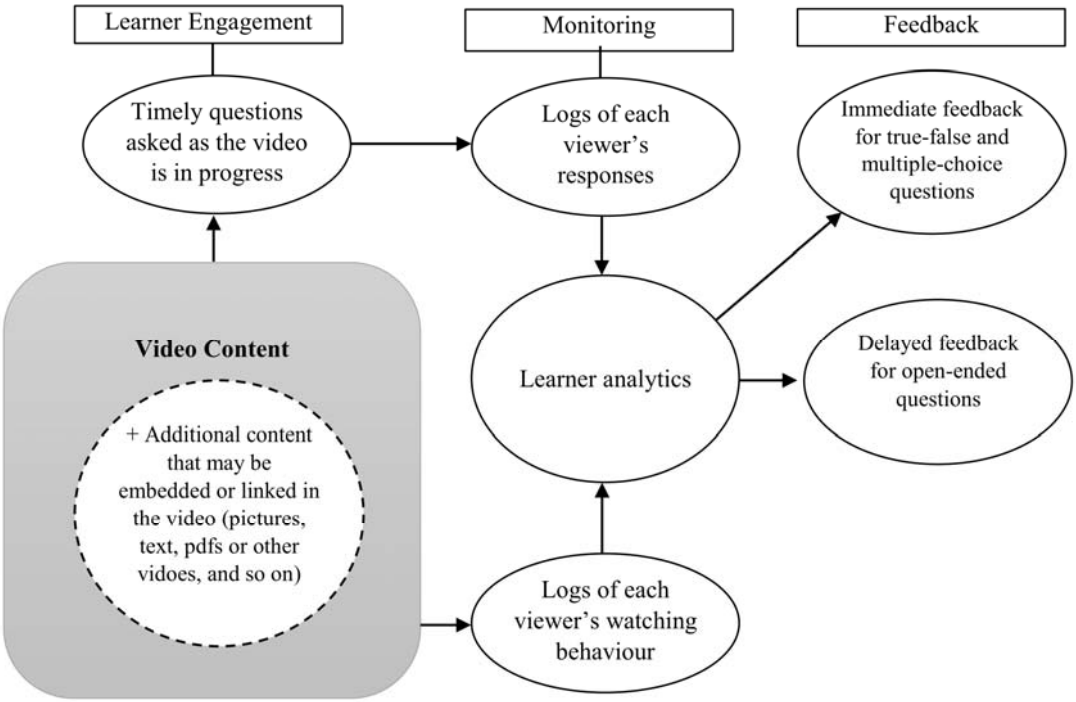

Figure 1. *A Visual Representation of How Common Interactive Video Models Work*

While watching an interactive video, students have more responsibilities (Uemura, 2015) and are more active as they do something more than passive watching. The users' interacting not only with the creator of the video but also with each other makes watching a video a "social activity" which is getting to be a mainstream practice in e-learning environments. According to Stigler et al. (2015), with Zaption, which is a popular interactive video tool, for example, "what has so far been characterized by passive watching with minimal discussion or review can now be made personal, interactive, and informative for both teachers and students" (p. 24). In other words, interactive videos seem to have the potential to transform how people learn with multimedia. They can be used to augment in-class instruction, support blended learning, flipped and online learning (Janzen, 2014).

They help teachers redesign traditional learning activities that could be done using videos and augment them with features that could hardly be a part of instruction delivered using traditional videos. According to Clothier (2013), as students can "move smoothly and seamlessly from one video to another there are no interruptions or breaks in the narrative," which in turn "provides a much higher degree of emotional engagement and immersion" (para. 35). Because not only the amount of interactivity provided but also features of interactive videos differ a lot across platforms, the following section gives a brief overview of major tools.

Basic features of interactive video software

There are numerous interactive video tools on the Internet, but this study focuses on six of them (EdPuzzle, PlayPosit, Zaption, Vialogues, Hap Yak and Metta.io) and compares them based on some criteria. One of the most significant criteria to consider is the amount of interactivity

provided by the interactive video tool. With most tools, the teacher can insert text, pictures, hyperlinks and so forth to augment the video (Figure 2). To interact with these elements, students can insert text, tick boxes, select an option or sometimes specify their response by drawing. Their responses are recorded by virtually all interactive video tools, and teachers can use such data to shape their instructional practices.

Figure 2. *Text Overlay and Interactive Table of Contents in Hap Yak (Adapted from https://www.hapyak.com*)

Students' responding to interactive elements is highly beneficial since it (a) promotes motivation and deeper engagement and helps increase attention, (b) informs them about their level of learning and (c) provides the teacher with detailed and actionable information about students' learning (Stigler et al., 2015). Comments in Vialogues, for example, work much the same in Zaption as students can see a question (or a comment) and they can reply to it. All comments and responses are seen by each viewer of the video (Figure 3). However, although discussion questions are inserted by the teacher in Zaption, anyone who is allowed to work with the video in Vialogues can leave time-stamped comments at any time point in the video. In this respect, Vialogues lends itself well to unstructured discussions. In general, with respect to the number of interactive elements available, Zaption seems to offer a lot more than the others (Table 1).

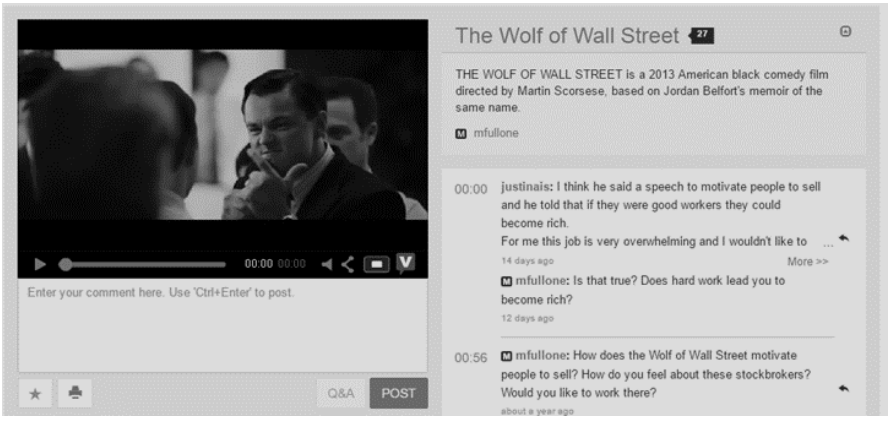

Figure 3. *The Main User Interface of Vialogues (Adapted from http://www.vialogues.com)*

Table 1. *Interactive Components of Common Interactive Video Tools*

		EdPuzzle	PlayPosit	Zaption	Vialogues	HapYak	Metta.io
Interactive Elements and Questions	Multiple-choice questions	✓	✓	✓	✓	✓	✓
	Open-ended questions	✓	✓	✓	×	✓	×
	Check-all-that-apply questions	✓	*	✓	✓	×	×
	Discussion questions	×	×	✓	✓	×	×
	Fill-in-the-blank questions	×	*	×	×	×	×
	Image slide	×	×	✓	×	✓	×
	Text overlay	×	×	✓	×	✓	×
	Drawn response	×	×	✓	×	×	×
	Comments	✓	×	×	✓	×	×
	Hyperlinks	✓	*	✓	✓	✓	✓

* Possible only in the premium version of the software

All interactive video platforms mentioned in this study allow teachers to track students' grades for each video. The data from student responses recorded by the interactive video tool operate in a two-way feedback system. On the one hand, students get information about how they are doing; for instance, through the feedback, they see immediately after they respond to a question. On the other hand, teachers gain insight into how their students are doing by means of analyzing user statistics (See Figure 4 for a screenshot of students' responses in Zaption). Students are usually able to check whether their answers are correct or not for multiple-choice, true-false or check-all-that-apply questions in most of these tools, and they are assigned marks for their answers. However, only two of the platforms allow teachers to grade student responses to open-ended questions. This is an important feature, particularly because it is usually open-ended questions rather than multiple-choice items that can be comfortably used to tap students' critical thinking skills. However, inability to grade the responses to open-ended questions is a significant drawback.

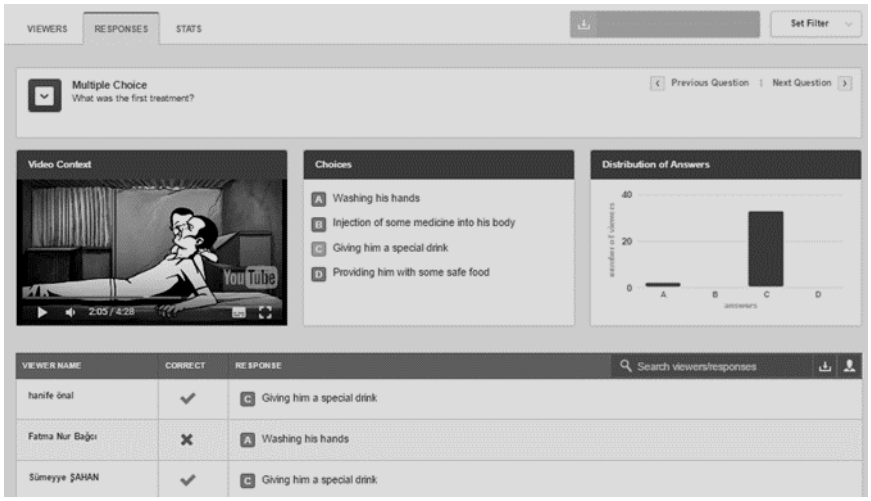

Figure 4. *A Screenshot of User Responses in Zaption (Adapted from http://www.zaption.com)*

Students usually see the answers to True/False or multiple-choice questions immediately after they answer the question. Moreover, the teacher can post additional comments, feedback (such as praise words) with the correct answer. With some tools (e.g.,

Zaption and HapYak), a certain section of the video can be played once again based on the student's response. For instance, if the student wrongly answers a multiple choice question, the interactive video system takes him/her to the point where the correct answer to that particular question is mentioned in the video (Table 2). In a global sense, Zaption and Hap Yak seem to offer more tools for feedback and monitoring than the rest in the list.

Table 2. *Feedback and Tracking in Major Interactive Video Tools*

		EdPuzzle	PlayPosit	Zaption	Vialogues	Hap Yak	Metta.io
Feedback	Replaying based on users' answers	✗	✗	✓	✗	✓	✗
	Jump feedback	✗	✗	✓	✗	✓	✗
	Instant answers	✓	✓	✓	✗	✓	✓
	Feedback/additional comments with the answers	✓	✗	✓	✗	✓	✗
	Grading open-ended questions	✓	*	✗	✗	✗	✗
Tracking	Tracking	✓	✓	✓	✓	✓	✓
	Exporting user's responses/grades	✓	*	✓	✗	✗	✗

* Possible only in the premium version of the software

While trying to choose an interactive video tool, it is also wise to check if the tool in question allows a certain level of flexibility with respect to the videos to be used. Some interactive video tools let teachers choose from a wide array of video platforms, and some tools even allow them to upload their own videos. In addition, videos can be customized by trimming unnecessary sections in most of these tools. A particularly useful function in some tools is that teachers can control fast forward and rewind options, obliging students to watch the video from the beginning to end without skipping any part (Table 3).

Table 3. *Features Related to Importing and Working with Videos and Cost*

		EdPuzzle	PlayPosit	Zaption	Vialogues	Hap Yak	Metta.io
Videos	Uploading your own videos	✓	✗	*	✓	✓	✓
	Getting videos using URLs	✓	✓	✓	✓	✓	✓
	Trimming your videos	✓	✓	✓	✗	✗	✓
	Rewind and fast-forward control	✓	✓	✓	✗	✓	✗
	Multiple videos in a single lesson (mashup)	✗	✗	✓	✗	✓	✓
Cost	Free	✓	✓	✗	✓	✗	✗
	Trial version	✓	✗	✓	✗	✓	✓
	Commercial (Premium) Version	✓	✓	✓	✗	✓	✓

* Possible only in the premium version of the software

Another significant criterion is the cost of these tools (Table 3). Most interactive video tools have both free and premium versions. Trial or free versions usually come with some feature limitations. Despite these limitations, even free versions of these tools offer lots of functionality. As one of the best of such tools, Zaption gives its users a two-month premium membership (up to a year) if a person that you invite signs up for a free account.

Good interactive video tools come with some other important features that might help develop the quality of teaching and learning. One of the most important of these functionalities

is that teachers can assign video lessons to a particular group of students and monitor their responses and video-watching behavior. With most of the tools, teachers can utilize a class code which can be used for easy access to the video materials. Such additional features that ensure ease of access are particularly significant as most people feel that they have to use multiple passwords in online environments. Another significant functionality to look for is the ability to embed lessons into a learning management system or an HTML page; thereby making it easier for students to follow and study what is presented to them rather than having to navigate between different systems. Integration with HTML pages could be achieved by using embed codes. For example, a teacher who uses a class blog to disseminate information and to encourage students to write might insert the interactive video on the blog by using embed codes. This is significant because additional navigation might not only add to the complexity of a course but also lead to deviation from core tasks. Some tools also work well with Google classroom, which is one of the most widely used educational components of Google (Table 4).

Table 4. *Other Features*

		EdPuzzle	PlayPosit	Zaption	Vialogues	Hap Yak	Metta.io
Other Features	Forming classes	✓	✓	✓	✓	✗	✓
	LMS integration	✓	✓	*	✗	✓	✗
	Html embedding	✓	✓	✓	✓	✓	✓
	Use of class codes or teacher codes	✓	✓	✓	✗	✗	✓
	Integration with Google classroom	✓	✓	✗	✗	✗	✗
	Recording audio notes or voice overlay	✓	✓	✗	✗	✗	✓
	Adding a separate audio track	✓	✗	✗	✗	✗	✓
	Highlighting sections of the video	✗	✗	✓	✗	✓	✗

* Possible only in the premium version of the software

Some tools also enable teachers to record their voice to add audio notes that draw students' attention to particular points. It is also possible in some others to add a new audio track. This might work well especially if lower level students are asked to watch a video that is difficult to comprehend. This is also a good option for introducing digital storytelling into the classroom by asking students to create their own digital stories. Drawing students' attention or raising their awareness can also be achieved by physically highlighting a certain area in a scene. This works much the same way as using boldface, underlining or italicizing in a written material. Now that basic features of interactive videos are presented, the next section focuses on the affordances of interactive videos in language instruction.

How to utilize interactive videos in language instruction

Most interactive video tools make it possible to add open-ended questions to help students think critically about the content of the video. Threaded discussions, like the ones in Zaption (Figure 5) or Vialogues, can be used for asking students to discuss controversial issues directly mentioned in the video or inspired by it to develop students' critical thinking and writing skills. Discussion questions and comments facilitate dialogue among students and between the teacher and students. As discussions take place in written medium rather than speaking, even shy students might feel less anxious and contribute to the discussion much more than they normally could (See the Appendix for a sample activity). Moreover, the specific time point in the video, at which the discussion question is inserted, makes a threaded discussion (embedded in a video) different from the one that you can see in a forum. In the former, the question that is intended to initiate a conversation among students is presented immediately after the viewers watch the related part. This helps motivate students to respond by putting the "there and then" principle

into practice. Another important point is that, as Bonora (2016) notes, teachers can use interactive videos to build "a two-way conversation between the teacher and the student" (para. 1). Learners' hearing and reading lots of target language and enjoying it is a good way to provide "meaning-focused input" (Nation & Newton, 2009). Similarly, expressing their ideas about the content of a video they like watching could help them produce "meaning-focused output" (Nation & Newton, 2009).

Figure 5. *A Screenshot of the Discussion about the Precautions that could Be Taken to Prevent Cholera around the World (Adapted from http://www.zaption.com) (Video source: http://www.ed.ted.com)*

The ability to add hyperlinks within questions or as an overlay on the video to additional content such as pictures, PDF documents, websites or other videos helps learners explore the topic deeper without getting out of the video (Clothier, 2013). This seems to eliminate the problem of getting lost in a sea of materials on the Internet and provides learners with a more holistic learning experience by immersing them into the activity. In addition, it might also help teachers arouse students' interest and develop their research skills. In addition to links to other materials, characters or objects in some interactive videos could be clicked to get more detailed information about that object or character. This could help students improve their listening or reading skills depending on the input provided in such further information sections.

Authentic video materials are usually difficult to understand for non-native speakers of English (Sherman, 2003), usually because of unknown vocabulary. Therefore, students need to work it on to comprehend the video material. In this sense, interactive videos could help teachers design activities that aim to help students not only do some guesswork but also practice vocabulary thanks to appropriately and timely presented visuals, text and additional context for difficult vocabulary.

Flipped learning has been gaining popularity in recent years (Crews & Butterfield, 2014; Hamdan, McKnight, McKnight & Arfstrom, 2013; Mok, 2014; O'Flaherty & Phillips, 2015), and screencasts prepared by the class teacher and videos from video sharing platforms are common in flipped classes in different domains, including language instruction. However, a significant problem that a number of researchers (e.g., Abeysekera & Dawson, 2015; Danker, 2015; Harrison, 2014; Mehring, 2015; Muldrow, 2013) considered in a flipped class is to make sure that students watch the assigned videos outside the classroom. Moreover, as flipped classes invest on student preparation (Hamdan et al., 2013), some of these researchers suggested taking into account students' workload. Although it is possible to know who clicked a particular video

in learning management systems (e.g., in Moodle), teachers can hardly know whether the student carefully watched the video or just opened it and left it unattended. Interactive videos are an excellent solution for this problem because the teacher can exactly know how much time each student spent for each video. In some cases, the teacher can control fast forward and rewind options. Similarly, it is easy for a teacher to know whether a student consciously attended the video or not with the help of the student's responses to questions. In addition to monitoring students' outside video watching behavior, the instructor can use data from analytics to decide on the activities to be used in the face-to-face portion of a flipped classroom (Janzen, 2014). Interactive videos could be used as a part of active learning strategies employed in the classroom. This is because the teacher can promote critical thinking by focusing on particular portions of a video.

Interactive videos also equip teachers with is feedback tools. Whether or not feedback has been found to improve student learning, teachers invest lots of time in corrective and formative feedback in language instruction. Fortunately, interactive videos offer teachers some tools regarding this issue. Students could easily see if their response to a multiple choice or gap fill question is true or not. In addition to seeing the answers to particular questions, students could also be provided with some additional comments depending on their answers, including positive feedback. This is actually not a big deal as it is a mainstream practice in online learning. The strong side of using interactive videos is the opportunity to do formative assessment. Instantly seeing students' answers and having access to group statistics enable teachers continuously shape their teaching based on live data from student responses. For instance, a lower-level correct response rate for a particular question might signal misunderstanding or lack of comprehension, and therefore additional work. Similarly, if almost all students correctly answer a particular question, the teacher sees that there is no need for deeper work on that issue. In addition, having access to information about how much time each student spent for a whole video or for individual sections of it (the latter being possible in some tools, such as Hap Yak) is a useful tool for getting information about learner engagement. In a global sense, learner analytics inform teachers about students' preferences, skills, attention span or even personality.

Interactive videos can be used to individualize the instruction. Students individually answer questions and take part in discussions. While doing these they progress at their own pace. The teacher in turn can check individual students' responses to questions and their contribution to discussions. As noted earlier, students can see their answers and whether these answers are correct or not; at the same time, they can receive positive comments, such as praise words, when they answer questions correctly. The teacher can view global statistics as well as individual students' answers and identify misconceptions or misunderstandings on a global and individual basis. This is a big step towards individualizing instruction. In some tools, it is possible to replay a certain portion of the videos depending on an individual's answer. This seems much better than asking the whole class to watch the videos additional times to solve comprehension problems.

It is possible to share the interactive videos that teachers create with other educators in the Internet community; this can help pave way for collaboration among teachers. Some tools, such as EdPuzzle or Zaption, allow their users to share the interactive video lessons they create. It seems easier to use publicly available video lessons by making necessary changes to adapt them for your own needs. This actually opens the doors for a collaborative teaching and learning space in which educators can learn from each other and help develop higher quality materials. It has the potential to bring together the knowledge and experience of various educators teaching English to students with diverse characteristics. Once the teacher prepares an interactive video, this material could be used with different groups of students at different time points, putting the concept of reusability and sustainability into practice. As preparing high-quality materials entails a lot of time and experience, sharing them with others and reusing them could help improve the quality of the instruction itself. EdPuzzle, for example, sees publicly available

materials as a way of opening sources for a great number of users who might be interested in them (Janzen, 2014).

Finally, just as teachers do, students can also create interactive videos as class projects, and their peers could watch, learn from and evaluate their work. There are several benefits of such a practice. First, students learn to get more productive and creative. They also learn to think critically, particularly when they are asked to insert some discussion questions in the videos. Second, they can learn to collaborate with peers if they are asked to create videos in groups. In addition to this, they do lots of research and listening to find the best video that could suit their needs and make a good interactive video. This equally goes for watching videos prepared by peers and evaluating them.

Potential problems

Teachers are able to embed questions or other interactive elements at any point in the video. However, one particular problem, as the participants to Bakla & Demiröz (2016) mentioned, frequent pauses due to questions or image slides might be disturbing. Depending on the feedback from the participants, Bakla & Demiröz (2016) decided to add fewer elements to the videos, resulting in less frequent pauses. They suggest using questions at the beginning of the video for prediction purposes, at several points during the video for comprehension and discussion and at the end of the video for overall comprehension and discussion. In this study, the researchers asked the students to watch each video three times, the first one being reserved for previewing questions at the beginning and overall comprehension questions at the end of the video. During the second viewing, the students worked on unfamiliar vocabulary items by doing some guesswork and sentence writing. The third viewing was reserved for several discussion questions inserted at different time points in the video. This strategy seemed to work, and the students felt less disturbed in this way. Similarly, (Uemura, 2015) worked with eighth grade students. Uemura reported that students did not like the video to pause for each interactive element. This implies that the number of pauses in each video should be carefully identified based on the characteristics of the learners and the videos.

Other problems are related to the need for preparing activities that promote deeper learning and having access to technology. With interactive videos, it is relatively easy to insert questions focusing on factual information and provide feedback on how each student responds to them. What is still difficult is to create video-based activities that will enable students to be involved in deeper learning activities rather than rote memorization and that will help develop their critical thinking skills (Janzen, 2014; Stigler et al., 2015). As Tucker (2015) suggests, focusing on open-ended questions might help facilitate discussion in the class. Threaded discussions might be of greater help because students can respond to what their peers write or comment on their ideas (See Figure 4). Another problem is related to the need for digital equipment. As individualized instruction is one of the aims of using interactive videos, each student needs to have access to a computer and the Internet, or they could use their own mobile device (usually referred to as “bring your own device”). Yet, interactive video tools might still have limited functionality in such devices.

Conclusion

In modern educational contexts, learners “need to acquire the kind of flexible knowledge that can serve as a foundation for innovation and performance in novel and rapidly changing situations” and memorization should be a thing of the past (Stigler et al., 2015). (p. 14). Interactive videos can help educators to achieve such a challenging yet attainable target. However, they cannot substitute MOOCs or learning management systems; they can complement these tools and help teachers monitor student behavior and verify comprehension (Edudemic Staff, 2014). In addition, they can add variety into instruction and can work well with digital formative assessment tools available on the Internet.

Interactive video tools are developing very fast and they are getting more and more functional as developers of these tools add new features to their software. Today, users can

input text in various parts of the video, but this is managed by the video creator himself/herself, yet in the future the user could decide where to insert text. Similarly, they can add voiceover or interact with particular characters in the video with further developments in artificial intelligence, but it seems that there is a long way to go for this. Nowadays we use web pages as a container in which we embed various content including text, pictures, videos and so forth. However, in the near future perhaps "the new canvas won't be the web page, but may be a video, and all the interactivity and links to content will be within the video itself" (Clothier, 2013, para. 47). This will significantly alter the way we interact with multimedia learning environments. Therefore, the features that are mentioned for some of the tools discussed in this paper might further be developed in the nearest future, so the best method could be to try each tool and decide on the most appropriate tool(s) based on personal needs and characteristics of the learning environment, students and tasks.

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Appendix. Sample Suggested Learning Activities Using Interactive Videos

Sample Activity 1: Developing Language Skills and Critical Thinking (Recycling)

Duration: 2 class hours
Level: Intermediate
Skills and areas practiced: Listening, writing and critical thinking
Learning objectives:
(a) to be able to listen for main ideas and specific information
(b) to be able to think critically about the subject matter and express ideas assertively in written form
Materials: This activity is designed using a ten-minute YouTube video uploaded into an interactive video tool. The teacher gets the link to the video and pastes it into this interactive video tool to produce an interactive lesson. The topic of the video is protecting the environment through recycling.
Procedure: The teacher designs the interactive video activity in which the he/she wants his/her students to watch the video three times. They are provided with a set of interactive components in each watching:
(a) In the first watching, they answer comprehension questions as video automatically stops at certain points pre-determined by the teacher. These comprehension questions are embedded in the right timeframe. If the student gives a false answer, he/she is immediately taken back to the point where the answer to that question is provided and is asked to watch it once again. This helps the students save time by watching only those parts that caused comprehension problems.
(b) The second watching is specifically reserved for critical thinking and discussion. The teacher embeds questions regarding controversial issues in the second watching. Students answer questions and respond to each other by means of a forum embedded in the video itself. Every student could see the responses to a particular question embedded in the video.

Sample Activity 2: Deducing Meaning from Context (Pollution)

Duration: 1 class hour

Level: Intermediate
Skills and areas practiced: Vocabulary and writing
Learning objectives:
(a) to be able to deduce the meaning of words by using contextual clues and sample sentences
(b) to be able to use the newly learned words in a context
Materials: This activity is designed using a ten-minute YouTube video uploaded into an interactive video tool. The teacher gets the link to the video and pastes it into this interactive video tool to produce an interactive lesson. The topic of the video is air pollution.
Procedure:
(a) In the first watching, the students answer some comprehension questions regarding the gist of the video (global questions about pollution).
(b) In the second watching they study unfamiliar vocabulary. When an unknown vocabulary item appears in the video, the video stops and a panel in the right hand side opens. The students read the definition of the word or they see a picture that explains the meaning of that word.
(b) In the third watching, the students are asked to write a definition and sample sentence for each vocabulary item.
(The number of new words should be no more than eight to ten words in a single class hour.)

Uzun Öz

Giriş
Videolar çok işlevli araçlar olarak eğitim ortamlarında ve özellikle dil eğitiminde kullanılagelmiştir. Çevrim içi video platformları sayesinde videoların günlük hayatta ve öğrenme ortamlarında kullanımı artmış, video derslerini takip etmek ve her konuda video içeriğine erişmek oldukça kolay hale gelmiştir. Videolar bu denli popüler iken mevcut videolara kullanıcıların etkileşimli unsurlar ekleyebilmelerini hedefleyen etkileşimli video yazılımları, video izlemeyi pasif bir eylem olmaktan çıkarıp izleyicilerin içerikle, videoyu üreten kimse ve diğer izleyiciler ile etkileşimde bulunmalarını sağlayabilmektedir. Popüler video platformlarından videoları kolaylıkla yazılımın içine aktarma, video içeriğine dair sorular sorma, kullanıcıların cevaplarını izleme, onlara anında geri bildirim verme vb. işlevlere sahip olan etkileşimli videolar başlangıçta reklamcılıkta kullanılmış, bugün ise eğitim ortamlarına girmeye başlamıştır. Ancak bu yenilikçi araçlar dil eğitimcileri arasında pek tanınmamakta ve eğitim ortamlarında yeterince kullanılmamaktadır. Bu nedenle bu literatür taraması yaygın olarak kullanılan etkileşimli video araçlarının temel özellikleri üzerinde durmakta ve bu araçları çeşitli kıstaslar açısından karşılaştırmaktadır. Bunun yanında bu araçların dil eğitiminde nasıl kullanılacağını ele almakta ve ortaya çıkabilecek bazı problemlere ve bunların olası çözümlerine değinmektedir.

Etkileşimli video yazılımları
Bu çalışmada altı etkileşimli video yazılımı ele alınmıştır: EdPuzzle, PlayPosit, Zaption, Vialogues, Hap Yak ve Metta.io. Bu yazılımların herbirinin temel özellikleri, kullanıcılara sunduğu işlevler birbirinden farklıdır. Örneğin sayıca en fazla etkileşimli unsur eklemeyi sağlayan araç Zaption iken, izleyicilerin kolaylıkla yorum bırakabileceklerini sağlayan yazılım Vialogues'dur. Bu çalışmada bu video yazılımları; etkileşimli unsurlar, geri bildirim, öğrencilerin sorulara verdikleri cevaplarının ve video izleme davranışlarının izlenmesi, videoları içe aktarma ve kırpma, maliyet ve diğer önemli özellikler bakımından ele alınmıştır. Bu yazılımların tamamı izleyicilerin cevaplarını ve bazıları ise izleyicilerin video izleme davranışlarını (örneğin videonun tamamına veya bazı yazılımlarda videonun hangi bölümüne ne kadar zaman ayrıldığı, ileri ve geri alma butonlarının kullanımı vb.) takip etmeyi mümkün kılmaktadır. Bu yazılımların hepsine video paylaşım sitelerinin en popüler olanlarından video aktarmak mümkün iken bazıları kullanıcıların kendi videolarını doğrudan yazılımın içine yüklemelerine de izin vermektedir. Maliyet bakımından ise dile getirilmesi gereken en önemli husus bu yazılımların ya ücretsiz olduğu ya da ücretli olanlarının özellik veya süre kısıtlamalı

deneme sürümlerinin bulunduğudur. Çalışmanın bu bölümünde yukarıda bahsedilen kıstasların yanında öğretim yönetim sistemleri ve Google Classroom gibi araçlar ile bütünleşme özelliği, ses kaydetme veya bir ses dosyası ekleme, videonun belli yerlerini vurgulama ve HTML kodu ile web sayfaları içerisine gömme özelliği gibi ölçütler de dikkate alınarak ilgili video yazılımları değerlendirilmiştir.

Etkileşimli video yazılımlarının dil eğitimine katkıları

Etkileşimli video yazılımları dil eğitiminde çeşitli amaçlarla kullanılabilir. Bu amaçların başında video içeriğinin zenginleştirilerek izleyicilere daha derin bir öğrenme deneyimi sunma gelmektedir. Video üzerine eklenecek etkileşimli unsurlar sayesinde öğrencilerin sorulara verdikleri cevaplar izlenip öğrenciye ayrıntılı geri bildirim verme imkanı mevcuttur. Etkileşimli videolar tersine döndürülmüş sınıflarda da oldukça işe yaramaktadır. Böyle bir sınıfta öğretmene öğrencilerin evde videoları izleyip izlemedikleri ve izleyenlerin de videodan neler anladıklarını takip etme imkanı sunmaktadır. Ayrıca aktif öğrenme stratejilerini kullanmayı öngören tersine döndürülmüş sınıflarda etkileşimli videolar öğrencilerin tartışmalara aktif katılımlarını sağlayabilir. Bu bağlamda, video içerisine yerleştirilmiş açık uçlu ve tartışma sorularının kullanımı yazma ve eleştirel düşünme becerilerini geliştirmeye yardımcı olabilir. Bunun yanında herbir öğrenci izleme, dinleme, okuma ve sorulara cevap verme etkinliğini bireysel olarak yaptığından ve öğretmenin bireysel düzeyde de geri bildirimde bulunma imkanı olduğundan, etkileşimli videolar dil öğretiminin bireyselleştirilmesine katkıda bulunabilir. Ayrıca öğretmenlerin ve öğrencilerin oluşturdukları etkileşimli videoları meslektaşları ve akranları ile paylaşmaları işbirliğini ve sosyal öğrenmeyi sağlayabilir, oluşturulan içeriğin yeniden kullanılabilirliğine katkı sunabilir. Bunun yanında, eğer öğretmenler öğrencilerden etkileşimli video hazırlamalarını isterlerse öğrencilerin de üretimde bulunmasına katkı sağlayabilirler.

Olası problemler

Etkileşimli videoların kullanımında özellikle videoların durdurulma sıklığı öğrencilerin dikkatini dağıtabilmektedir. Bu bakımdan etkileşimli unsurların video içerisindeki yeri ve zamanı dikkatli bir biçimde ayarlanmalıdır. İkinci bir problem de etkileşimli videoların içerisine çok sayıda çoktan seçmeli veya doğru/yanlış soruları yerleştirme eğilimi göstermektir. Öğretmenler sadece kavrama düzeyine yönelik etkinlikler yapma ve etkileşimli unsurlar ekleme yoluna gidebilirler. Ancak öğrencilerin eleştirel düşünme becerilerini geliştirmeye yönelik açık uçlu sorular ve tartışma sorular sorulması ve üçüncü parti sitelere ve içeriğe yapılan bağlantılar ile öğrencilerin araştırma becerilerinin geliştirilmesi de önemlidir. Bunun yanında etkileşimli videolar bireysel kullanıma yönelik araçlar olduğundan, her öğrenci için yeterli donanımın ve hızlı internet bağlantısının olması gerekmektedir.

Sonuç

Etkileşimli videolar çok çeşitli işlevleri yerine getirebilmektedir. Bu işlevler dil öğrenme ortamını daha canlı ve renkli hale getirmeye yardımcı olabilir. Etkileşimli unsurlar sayesinde videolar metinleri görselleri ve bağlantıları içeren zenginleştirilmiş araçlar haline gelmiştir ve yakın gelecekte aynen web sayfaları gibi içerikleri bünyesinde barındıran bir kap gibi yaygın olarak kullanılabilecektir. Etkileşimli videolar sayesinde, video izlemek artık doğrusal ve pasif bir eylem olmaktan çıkıp etkileşimli ve aktif bir eyleme dönüşebilir. İzleyicilerin sorulara verdikleri cevaplar, tartışmalara katkıları ve videoları seyretme davranışlarını izleme imkanı biçimlendirici değerlendirme sürecine ciddi katkı sağlayabilir. Bunun yanında etkileşimli videolar öğrencilerin eleştirel düşünme becerilerini de geliştirmeye yardımcı olabilir ve video izlemeyi daha eğlenceli bir eylem haline getirebilir. Olumlu ve olumsuz yönleri ile birlikte etkileşimli videolar evrimleşmektedir ve dil eğitiminde yerini almalıdır.