As ações tomadas para encaminhar tal proposta não parecem ter logrado sucesso pelas próprias limitações operacionais, mas também porque o grande conjunto da população se negou a abandonar seus hábitos, como já fizera no que tange ao esporte (Melo, 2011).

Obviamente, não se trata de culpar o partido único por suas ações, tomadas a partir do que lhe parecia melhor e mais adequado ao espírito do tempo. Apenas deve-se chamar a atenção para as negociações que marcam, em maior ou menor grau, qualquer cenário histórico, nos permitindo identificar o quanto o grande conjunto da população também foi importante e partícipe no forjar de princípios que marcaram seu momento, mesmo quando isso se deu na recusa a aderir a determinados comportamentos esperados.

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Video as a Tool of Learning New Skills

Hamid Boudechiche*

pp. 73-90

Introduction

Online learning especially via videos has proved a greatly appreciated approach. The popularity of this educational means is tightly linked with its mimicry of real life learning as it involves both audio and video features. The advent of the digital age, the spread of connectivity to very remote dots on the planet, and the expansion of internet services among very disfavored communities put the use of videos ahead of many ways and methods of learning.

The availability, and in a great number of cases, the affordability of this digital learning method spurs people especially the youth with all sorts of social background to embark on learning new skills. Video learning is not bound by any educational requirements nor is it restricted to any social or intellectual category. This situation helps people learn special skills either by perfecting old ones or by starting new ones from scratch. From cooking to drawing, painting, styling, hair dressing, gardening, building, welding, carpentry, language learning, and an endless number of other talents are more and more being mastered through video streaming.

This paper deals with the practice of acquiring new skills via video in Algeria. An online survey is carried out for that purpose among a sample of youth mostly students. The results are analyzed to understand, in general how digital and in particular how video leaning the Algerian youth has turned and to assess how effective is the video learning approach becoming? Being not sizeable enough, the sample does not seek to produce very precise conclusions, it does serve as an indicator of ongoing trends. Conclusions are finally drawn to show the efficacy of the method, its wide or limited adoption, and the trendy skills among the Algerian youth.

The questions the paper seeks to answer revolve around the following:

1 - What is the rate of video viewership?

2 - How significant is the use of video in self-directed learning?

3 - How common is the state of using video to acquire new skills and how common are skills learned in this way?

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1. Literature review

Lipomi (2020) noted that although video-based learning has been an educational tool for decades, it is the huge advance in the video recording, production, and distribution, which boosted video as a greater part of online learning. As an example, YouTube pride themselves for the 2 billion monthly active users with viewing session averaging 40 minutes. The increase in the use of video reflects the remarkable ease with which videos are (re)produced.

As the use of video-based learning has grown over the last decades, research has also shown interest in the field. Mayer (2006) led the way with his 12 design principles drawn from educational psychology, learning sciences, and educational design. Most of the current research about the use of video sprang from Mayer's theoretical foundation. Kay (2012) for instance discussed the benefits learners can draw from video podcasts. O'Callaghan *et al.* (2017) in their study about the efficiency of lecture recordings gave mixed findings between the use of video and student learning especially in attendance and learning outcome.

The performance of students with a video instructional format in a large programming course by Angrave *et al.* (2020) was better than that of those who did not use video. Likewise, low performing learners fare much better in the course with repetitive video watching than those who did not repeat video. This demonstrates how the amount of time watching video affects the learning process and videos are handy in allowing repetition. It shows also learners willingness and desire to re-watch video which is an indication of learners' expectations from video. Not all types of videos are popular with learners, Bates (2018) wrote, "students often reject videos that require them to do analysis or interpretation; they often prefer direct instruction that focuses primarily on comprehension", p. 269. Costley *et al*. (2017) found complete video viewing and completion by learners closely related with using instructional design methods.

In their common work Mirriahi and Vigentini (2017) uphold that the expansion in video use is associated with the relative ease of video production (e.g. voice over PowerPoint) with accessible ready-to use tools, institutionally-available recording studios, and streaming media platforms, such as YouTube. Further, for Hansch *et al*. (2015) video is becoming the main method of content delivery in online education, a sector that is steadily experiencing growth according to Allen and Seaman (2017).

Sherin, and van Es. (2009) noted in a report that videos show information and details difficult to explain by text or static photos. In addition, videos can attract students' attention, thus motivating them and engaging them to increase their collaboration. For Zhang (2006) using videos can lead to better learning outcomes. Moreover, video can support different learning styles, specifically students who are "visual learners", Calandra (2006) reminded.

2. Backgroud

2.1. Mutations in learning methods

The overall change in methods of learning is greatly due to the nature of video technology. First, no major skills are needed to use this technology. Second, a simple device as a mobile phone can provide access to all sorts of video sources that can be watched just about

anywhere on the planet. This enables widespread learning in areas once geographically isolated (6 Pros). Third, the amount of freely available resources on open platforms can respond to the needs of learning a huge number of fields and skills. Lastly, easily produced videos helped teachers think of new ways of presenting knowledge.

The concept of classroom flip in which the role of the teacher is reduced to very few tasks of guidance or assessment, in a world shifting to a hastened implementation of technological learning tools, is widely spreading. Advances in the field of Information Technologies (IT) are creating new opportunities for learning. In this method, the student familiarizes with the course independently through material online. He has a good knowledge of the material in advance, his time with the lecturer is used in group projects, asking questions, getting responses, and understanding complicated issues. The lecturer can deal with personal tutoring and focus on challenging tasks (Rouse, 2017).

Teaching platforms, Massive Open Online Courses (MOOCs), websites, blogs, or YouTube videos are becoming favorite substitutes of traditional teaching methods. Instead of a passive learning by listening, reading, or memorizing, the new methods prompt students to engage actively in seeking knowledge by searching information. In this approach the initiative is with the learner who controls the pace and schedule of his studies. This promotes a healthy and motivating environment.

The basic concern of the paper being learning skills using online videos, adult learning theories ought to get a proper interest. In video skill learning experience, the process of learning involves two facets; the first one is the use and reliance on video-based learning (VBL). The second aspect is that this activity is a form of self-directed learning (SDL). University students taken as a sample in the study fit in the category of adults and should be dealt with from the perspective of adult learning theories. Skill learning in this case is not imposed on students but a free and personal motivation to acquire knowledge and competence in a given field of the learner's liking or need.

Most adult learning theories agree that the way adults and children learn differs in many ways. Adults tend to be more self-motivated, as they understand the value of education and often have a solid goal in mind when they begin studying. Children need higher levels of engagement, as they are less naturally motivated in learning situations and can be distracted easily. Adults can use their existing knowledge to assimilate new concepts, while children often approach a new subject with an entirely blank slate (Valamis, 1997).

Likewise, adults rely on experience and are much more able to self-direct to solve problems and learn new concepts, while children require some direction when in front of new concepts or situations. "Valamis, 1997" mentions 10 adult learning theories which are: Andragogy, Self-directed Learning, Transformational Learning, Experiential Learning, Project-based Learning, Action Learning, Behaviorism, Cognitivism, Constructivism, Social learning theory, but only some of these are handled here as they are closely associated with VBL and SDL.

The first theory is andragogy and it means the art and science of teaching adults, as opposed to pedagogy, which is the art and science of teaching children. Malcolm Knowles (1968) developed this theory which posits that the adult learner is better suited to direct their own learning than a child learner is. He is able to use his own knowledge base and life experience to help in the learning. The adult learner can be engaged, present, and ready to learn if the material is of immediate relevance or importance such as in a new job, social, or life role. The students sampled in this study personally seeking the mastery of a new skill fit well in this case.

The second theory is Self-directed Learning (SDL), D. R. Garrison (1997) developed this theory, built on Malcolm Knowles' theory of andragogy. It is based on how adults self-manage and seek to understand their learning needs. SDL stipulates that learners set learning goals, find resources, create learning schedules which they follow, and ultimately evaluate their learning outcomes. They also search for help from teachers, mentors, or peers and are ready to react in a positive manner for being able to pilot their learning journey. This category of learners, take the needed time to make informed decisions, and incorporate learning on a daily basis. "Valamis, 1997" assert that "self-directed learning is well suited for self-motivated learners, as well as those who respond well to technology-based learning." This fact too is applicable to the skill learners sampled in this study.

John Sweller (1988) developed the Cognitive Load Theory also known as Cognictivism by expanding the principles of the human cognitive model of information processing. He suggests that memory has several components: sensory memory, which is a transient collecting of information from the environment. Information from sensory memory can be picked for temporary storage and processing in working memory, which has very limited capacity. This processing is necessary for transformation into long-term memory, which has virtually unlimited capacity. Because working memory is so limited, the learner has to select which items from sensory memory to pay attention to during the learning process (Brame, 2015).

Based on this model of memory, Cognitive Load Theory suggests that any learning experience has three components. The first of these is intrinsic load, which is inherent to the subject under study and is determined in part by the degrees of connectivity within the subject. The word pair (blue = azul) (Brame, 2015) is a common example to show an information item with low intrinsic load, whereas a grammatical concept can be an item with a high intrinsic load due to its many levels of connectivity and conditional relationships. The second component of any learning experience is germane load, which is the level of cognitive activity necessary to reach the desired learning outcome like being able to make comparisons, to perform an analysis, or to elucidate the steps necessary to master the lesson. The final purpose of these activities is being able to incorporate the subject under study into a schema of richly connected ideas. The third component of a learning experience is extraneous load which is the cognitive effort that distracts the learner from the desired learning outcome like confusing instructions or extra information (Draus, 2020).

2.2. Video-based learning

The large popularity of videos speaks for itself; the following figures highlight this fact beyond any doubt. There "are 22 billion daily video views: Snapchat (10 billion), Facebook (8 billion), and YouTube (4 billion). By the end of 2018, 75 % of workers at large organizations would have dealt with a video content more than 3 times a day" (as cited in Pandey, 2019). Moreover, an amazing "59 % of senior executives opt for watching a video if both text and video of the same topic are available on the same page. Viewers retain 95 % of a message when they watch it on a video, compared to 10 % when reading it in a text" (as cited in Pandey, 2019).

The increasing influence of digital videos on our everyday life is unquestionable. Online video sharing sites such as YouTube, Vimeo, and Metacafe boast monthly audience numbers in the millions. With digital videos continuing to gain popularity, their extension to

educational system is only natural. Indeed, learners "today are using educational videos as a tool of learning for everything: from basic skills - like changing a tire - to the latest dance craze". In the United States, Millennials (people now aged 21 to 40) make up 92 % of the digital video viewing audience (Next Thought Studios, 2017). Abstract topics that once seemed difficult to teach and learn are now more accessible and understandable thanks to the availability of educational videos for online learning.

Video-based learning (VBL) possesses unique features that make it an effective learning method which can enhance and partially replace traditional learning approaches. It is a powerful model used to improve learning outcomes and learner satisfaction (G-Cube, 2017). Kleftodimos and Evangelidis (2016) emphasize the importance of interactive features in video-based learning environments. They place the increasing emphasis on integrating interactive elements and web-content into educational videos. For example, the use of notes to video content can provide learner with additional explanations, highlight points of interest, raise questions, and provide feedback (Sablić *et al*. 2020).

Unlike education by a tutor, in self-directed education also known as self-education or simply autonomous learning, the learner takes charge of his learning tasks like reading, understanding, memorizing, and solving problems. He is expected to shoulder the responsibility of those tasks pertaining to a tutor like choosing and providing the appropriate material, checking results of drills and tests, and making sure of achieving the set objectives and reaching an outcome.

These tasks of self-education were classified by Lee and Osop into four basic dimensions in self-directed learning. The *control* dimension is the first one and is concerned with the potential of the learner to manage his or her learning. Second, is the *initiative* dimension related to how a learner can proactively make decisions and take actions in his learning process. The *motivation* dimension is the third one and it explores the desire driving the learner in pursuing his or her learning goals. Lastly, the *self-efficacy* dimension and is concerned with the learner's belief in his or her capabilities to produce an outcome.

The website *Next Thought Studios* published an article in 2017 titled "Why Videos are Important in Education?" where they enumerate four requisite methods in effective learning videos to maximize reception and processing of information by the learner. The first method is *Signaling*: it consistes of the use of on-screen text or graphics to direct the learner's attention towards specific information that needs to be processed.

Segmenting: The division of information into suitable chunks to facilitate its processing. This is achieved through the effective management of video length (between five and ten minutes) and the use of break points or pauses throughout to help keep viewers engaged. Short chunks are the standard, yet in specific situations some learners may opt for longer videos. A well-conceived and nicely presented material covering all the content in one place offsets the factor of time. "[L]onger [is] better, but fewer mistakes", commented a learner (Yuen *et al.*, 2018, p. 96).

Weeding: This method is assciated with the exclusion of unnecessary information that may prevent the learner's ability to process and recall the information. Weeding maximizes the memory capacities for both the auditory and visual channels. *Matching Modality*: This refers to presenting information in a way that targets both the auditory and visual channels simultaneously. An example of this would be providing a narration while showing an on-screen animation. This serves to increase processing in the working memory and prevents cognitive overload.

In videos, visual aspects provide the primary source of information and the audio feature is used to elaborate on the information (G-Cube, 2017). While the audio feature is a critical aspect of learning, the combination of sound and pictorial content allows the viewer to memorize information easily, especially information that is inherently visual. Even if the subject is not visual, a video is usually better than a podcast or an audio recording since it can capture nuances of meaning and body language. Video is a real bounty for visual learners who retain visual better than auditory information (Brainscape, 2020). Some statistics in relation to employee memory of a training matter, found that the average worker "forg[ets] 65 % of material they've covered within just 7 days of completion. After six months, ... the average employee will forget 90 % of the same content covered" (O'Donnellan, 2019).

Data has shown the use of video could reduce memory gap in comparison to text-only content when assessed immediately after training or a lecture. The figure may reach a staggering 83 % when tests are delayed. Reports from Thermopylae Company back up this point; they found that the human brain can "process imagery 60,000 times faster than text and further cements video's case with the powerful stat that 90 % of information transmitted to the brain is visual" (O'Donnellan, 2019). Visual content is clearly more effective or "stickier" form of delivering learning not only for visual subjects but for auditory ones too.

Video-based education keeps learners interested and engaged and breaks up monotony of "page-turning", it also reduces the reading load and thereby shortens the training time. Moreover, given modern learners' hectic schedule, being able to fit in smaller chunks of learning when able, is the perfect solution to a busy workweek. Delivering these small learning modules through video allows learners to complete their training on the go and at their own pace. In relation to learning length, when delivered with video and as part of a microlearning strategy which means the run length should be no longer than three minutes according to elearningindustry.com in their 2019 publication (as cited in O'Donnellan, 2019).

2.3. Cognitive Theory applied to Video Learning

This theory, developed by Richard Mayer (2002) upholds that two channels of input, audio and visual combined can increase cognitive throughput, but if either channel is overloaded with undesirable information, the negative aspects affect both channel through-put. Some consequential effects of this theory (Mayer & Moreno, 2003) include multiple representation principle, which states that words and pictures provide decreased cognitive load better than words alone. The contiguity principle requires words and pictures to be presented together to have an impact. A third principle is the coherence principle, which states that cognitive load is reduced when non-message images and sound are reduced in the media. The modality principle is that spoken word over images is superior to written text and images together. Finally, the redundancy principle is that images, and narration is superior to images, narration, and text. Cheah & Leong (2019) studied the redundacy effect and found that indeed screen and narration was superior to screen, narration and text.

Brame (2016) summed up the use of video as follows:

> *Educational videos have become an important part of higher education, providing an important content delivery tool in many flipped, blended, and online classes. Effective use of video as an educational tool is enhanced when instructors consider three elements: how to manage cognitive load of the video; how to maximize student engagement with the video; and how to promote active learning from the video.*

These facts serve as guiding lines in the assessment of the studied sample as how the respondents reacted to the concepts of the chunking. Handling of the video-based learning epitomizes this study in that the goal of the videos used were designed to be short and focused, only use video and narration to reduce cognitive load and to allow the students to follow along with the video by providing multiple program files that were used in the videos (Poquet *et al*., 2018).

The adequate videos for self-directed learning are instructional and informational videos. Instructional videos are used to teach a process, such as a step-by-step tutorial or how-to video. These include tutorial videos, training videos, and process videos. For example, "How to add a new customer to the database" is a good instance of instructional videos (TechSmith, 2021). Informational videos too belong to the category employed in self-directed learning because they serve to deliver "facts, ideas, or important information". They include explainer videos, presentation recordings, and product demos. For example, "Overview of the new safety regulations" or "Insights from the last departmental meeting" are titles that fit in the category. Video-based learning requires quality educational videos that are also engaging and enjoyable to watch (Next Thought Studios, 2017). This is true for the overall use of videos as it is valid for self-directed learning videos.

3. Research methodology

After laying a background for the study, the paper continues with the survey which is a questionnaire using a Google form. The questionnaire consists mostly of closed ended questions. For some questions, students can choose more than one answer, which explains, for these questions, the total number of responses exceeding the number of respondents. The survey is of the longitudinal type because the collection of data is not limited to a precise point in time but rather spans over an indefinite period. The aim is not the reflection of punctual attitudes of respondents but the representation of the trend of video-based learning skill among students.

Algeria is a country with internet penetration standing at 59.6 % of the total population according to Datareportal report (January 2021). With this score, Algeria comes well after Northern America with 90 %, Western Europe with 93 %, and slightly heading neighboring Northern African countries with an average of 56 %. The report states that Facebook caps the rank of the social media in Algeria followed by YouTube then come the other brands in a picture closely mirroring the world pattern. It should be noted that these figures represent the overall population; numbers for educated young connection minded students are well above these mean ones.

The position of YouTube at the top of these media is essential to the study because it is a leading video provider platform. Undoubtedly, video is not limited to this platform; it can be viewed from other platforms, blogs, web pages, or websites. The overwhelming

shift to distant learning with the help of more accessible technologies in the formal educational world did not go unnoticed. Online individual learning especially by the means of videos soon took over to become a real public phenomenon. Sprawling videos on these platforms and on the web turned online learning by videos into a widely spread practice. In a fast growing connected world, videos are being used for many purposes and mainly for teaching and learning different skills.

3.1. Discussion

The respondents are predominantly Algerian females (100 females, 10 males, including one male from Niger and one female from Mali) which affects responses about the type of skills learned. With an active connectivity satisfaction exceeding 80 %, as 23.9 % have a permanently active connection and 57.8 % with an often-active one, most of the students have to bear the inconvenience of a slow internet. For the used devices, mobile phones 102, far outnumber laptops/desktops 33 and tablets 03, with some users having more than one device.

3.2. Effectiveness of VBL

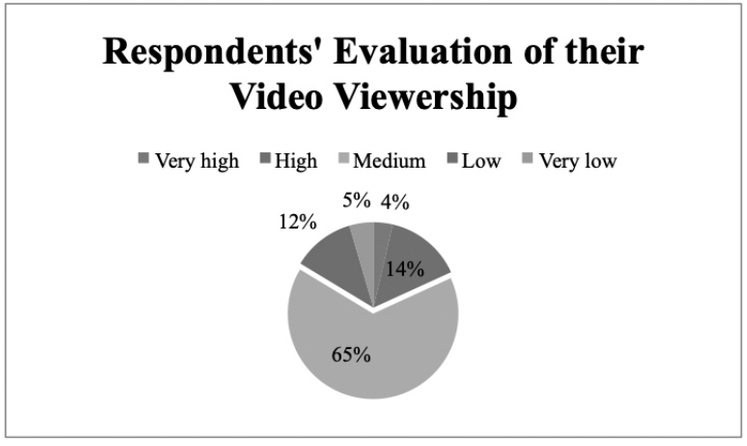

Ilustração 01 – Video viewership as assessed by students.

The study group was asked about their video watching and have to estimate how they perceive this experience? On a range extending from "Very high" to "Very low" with "High", "Medium" and "Low" in between. The "Medium" choice topped the replies with an almost symmetrical distribution of the values "Very high", "High" on one side and "Low", "Very low" on the other. The notable 65 % "Medium" evaluation of although video watching is explained by the diversity of online life. The "Medium" score is rather a good assessment in a media-swarming digital world. This is particularly true when the targeted sample is a multi-interest group of young females. It can be concluded that video watching does not match other online media it is occupying a high position in the digital life of the sample group.

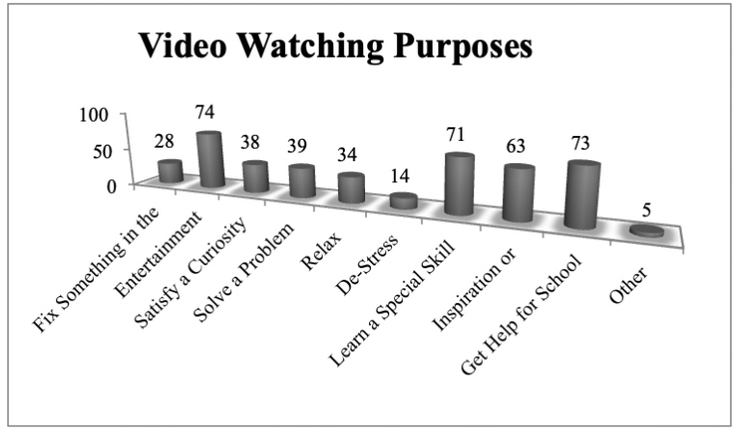

Ilustração 02 – Video watching purposes.

The group had to answer a question related to the type of video content to help estimate where does skill video-based learning stand among other types. To the question what is the main purpose sought by watching videos, entertainment came first and school works second with 74 and 73 responses respectively, closely followed by 71 students choosing learning a skill. Number 04 in the list are videos viewed for inspiration and motivation.

Aslam (2020) argues even though music and game videos are heading YouTube most watched channels, the popularity of "How To" and training videos is fast growing too.

The responses not only corroborate the thesis here advanced by Aslam, but put "How to" video ahead of entertainment one when considering videos for inspiration and motivation and those for getting help for school works as falling under the category of training and "How to".

Tabela 01 – Respondents appreciation of VBL features

VBL Positive Features	Number of Responses	Percentage
Combination of audio and video feature	65	60,2 %
Stop, rewind, and repeat feature	50	43,3 %
Highlighting signals (arrows, text, colors, comments, graphics)	41	38 %
Short chunks	21	19,4 %
Other	2	1,8 %

The survey sought to assess student preferences and attitudes vis-à-vis video features commonly reported in the academic literature as being positive and appreciated in the learning process. The combination of audio and visual is a feature highly appreciated by respondents. As stressed in the literature, the use of two channels, auditory and visual facilitate learning and justifiably make this characteristic top the survey replies. Almost equally valued is the video user technical ability to stop, rewind, and repeat viewing a video. This feature is essential for learning at one's pace. Coming second with a rate of 43.3 % after the video and visual preference with 60.2 %, the repeat possibility in video is greatly helpful (Angrave *et al*., 2020).

Signaling or the use of highlights is a feature mentioned by Brame (2015) and is the third preference of the group with a rate of 38 %. It helps lower the extraneous load enabling the learner to focus on the key parts of the information. Although very significant, chunking or the division of video into short segments is the last preference of the group with a percentage of 19.4 %. In another response about the favorite duration of a video, a very sizeable number opted for short timings.

Tabela 02 – Favorite duration in an educational video

Favorite Duration of a Educational Video	Numbers of Responses	Percentage
15 minutes	22	20,20 %
6 minutes	18	16,50 %
3 minutes	17	15,60 %
9 minutes	16	14,70 %
30 minutes	13	11,90 %
20 minutes	10	9,20 %
1 hour	8	7,30 %
1 minute	4	3,70 %
2 hours	1	0,90 %

Focus is vital in learning, therefore duration, in the design of an educational video, has to be adapted to this constraint. According to different studies, the usual time in an educational video ranges from three to ten minutes with an ideal preference for six minutes. In the survey, although the first place goes to videos of fifteen minutes with 22 respondents, videos of six minutes come immediately in the second position with eighteen respondents. The range, three minutes to nine, counts 51 over 109 respondents, far exceeding the first choice thus dovetailing with published literature findings. The shorter the video, the less bored gets the learner and the more likely is the probability of learning and acquiring a skill.

3.3. Skill acquisition via VBL

The survey indiscriminately includes as a skill any amount of knowledge or set of information associated with one field and help to perform a given activity or assimilate a savoir-faire. It may encompass the learning of a craft, the acquisition of a language, mastery of typewriting, or the use of software like PowerPoint and Excel. Students were left to freely understand the concept of a skill and respond accordingly.

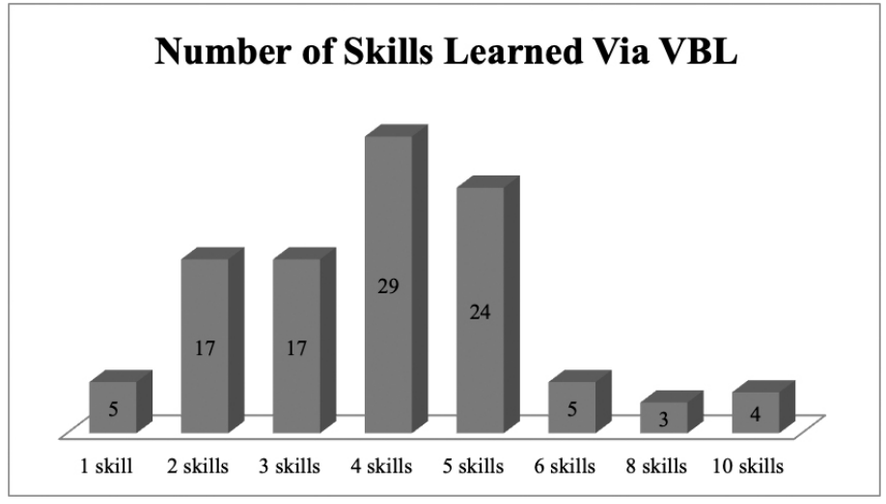

Ilustração 03 – Number of learned skills.

Well-designed video when coupled with motivation and need allows the mastery of more than one skill. Indeed, students were asked how many skills they learned using videos? The greatest part of respondents asserted having learned more than one skill in this manner. From 104who answered this question, 29 said they learned 4 skills, 24 learned 5 while 17 and 17 others acquired 3 and 1 skills respectively.

One of the frequently stated advantages of video learning is flexibility of the repeat feature. A person can pause, stop, rewind, and schedule the timeline of learning. Unlike in a traditional training, a video learner need never miss something, as long as they have time to try again they can go back (Next Thougth Studios, 2017). If freedom of repeating the material as many times as they want or need is of great help, the possibility of controlling the pace of their studies offers better opportunity for less skilled learners. Most importantly, the learner may choose the specific parts they want to learn.

What also makes video material attractive is the fact that it is accessible all the time. Any individual desirous to study by themselves can simply search the content they want and start learning. A person can use the material and study it when it suits them the best (Rouse, 2017). This is extremely helpful for adult learners who may be working during the day or raising a family. Because of flexibility characteristic such a learner can take his reviewings of the video in one go or schedule them on a period of his convenience. Videos

may feature very skillful or foreign experts to deliver content an option not available in all traditional classes.

Tabela 03 – Number of viewings to assimilate a video content

Count of Viewings to Assimilate a Video Content	Number of Responses	Percentage
1 time	15	13,60 %
2 times	49	44,60 %
3 times	38	34,50 %
4 times	4	3,60 %
5 times	4	3,60 %

The results obtained from the survey about the average number of repeats it takes students to feel comfortable with content of a video revealed that only two viewings suffice a notable great part of learners. Out of 110 respondents who answered this question, 49 of them, 44.6 % find that 02 times made them feel satisfied with learned matter. On the other hand, if as much as 38 students necessitate 03 times of repetition, 15 students can assimilate the video matter from the first time.

Tabela 04 – Number of watched videos to learn a skill

Number of watched videos to learn a skill	Number of Responses	Percentage
1 video	5	4.54 %
3 videos	50	45.45 %
5 videos	40	36.36 %
10 videos	9	8.18 %
15 videos	5	4.54 %
20 videos	1	0.90 %

Multi-viewing can be applied to the same video or can be extended to other videos featured by the same author and source or presented by another person from a different source. Accordingly, the survey attempted to cover this situation by assessing the learners' resort to more than one video. Students' answers were almost a match of the question about one video repeats. Fifty students need three videos to be satisfied with their skill learning, whereas 40 students watch five videos and nine students watch as much as ten videos to feel comfortable with their skill. On the other hand, only five respondents watch one video and five watch fifteen videos to learn a skill.

Among the questions associated with the evaluation of the skill learning experience, one sought to explore the students' satisfaction in their self-directed learning endeavor. They were asked to grade their experience on scale ranging from 01 to 10. From first sight, 75 from 107 or 80.25 % graded themselves between five and ten thus expressing acceptable satisfaction to complete satisfaction. Another notable figure is the grade 07 which is the median of the range (5, 6, 7, 8, 9, 10) was the self-allocated grade by the highest number (25) of learners not only within the satisfied part but among the total number of respondents as well.

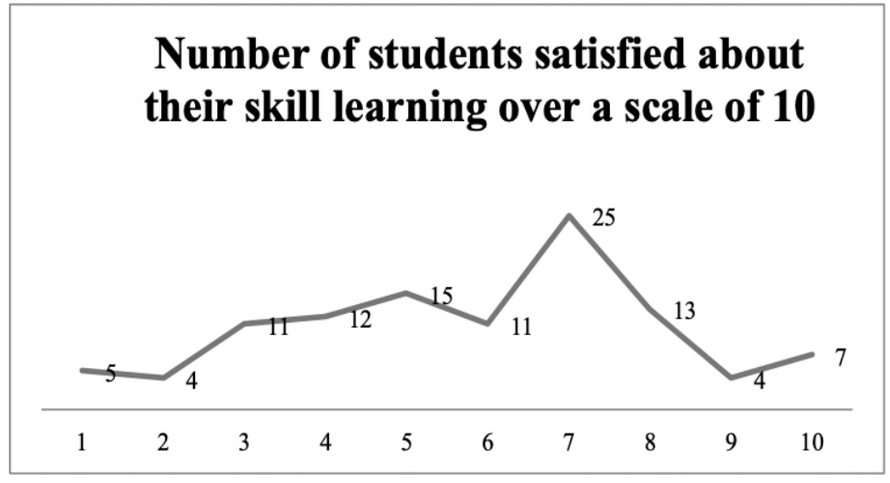

Ilustração 04 – Number of students satisfied about their skill learning over a scale of 10.

In spite of the high numbers of people feeling positively about skill acquisition by VBL, the experience, as introduced above, involves self-education or what is increasingly becoming known as SDL. The survey, so as to assess students' skill learning from this perspective, sought to estimate their appraisal of self-teaching approach and if they agree about its non-flawlessness. Again, student's awareness was strikingly high as 82.95 % confirmed agreeing with the fact that SDL bears many shortcomings.

Among those who have a great confidence in SDL, one student's reaction was "No, I do not agree. Everyone can teach himself by watching more than one video, then take notes, like I did." As an example of those who are wary about the perfection of SDL, is one who

wrote, "Learning by video remains an imperfect educational approach that is not the same as learning with your teacher and the presence of your learning group." For this other one relying on videos alone "is not sufficient because the student cannot understand and cannot find an answer."

To implicate self-education further and while stating encountered difficulties, the greatest majority of 76.10 % put the blame on video technical aspects like slow connection, poor quality, and fully or partly blurred video. Video content flaws like poor delivery or non-explained jargon were the pleas of another non-negligible 40.40 % of the respondents. In the last position with 26.60 % come the students who have issues such as the difference between video content and practice or between video content and the learner's expectations. These issues may lead to a despairing waste of time and cause the loss of motivation even though motivation is usually very strong among this type of learners ("SDL learners").

3.4. Findings

1. Video watching does not match other online media but it is occupying a high position in the digital life of the sampled group 65 % of whom having a medium preference for videos over other media while 14 % and 4 % have high and very high preferences respectively.

2. Audio and video like play, stop and rewind feature is appreciated in videos just as segmentation and short streaming not exceeding 10 minutes.

3. The category of "How to" and other training videos where can be fit skill learning videos is well classified and bodes well for the future of this type.

4. Skill acquisition with the help of VBL is common and most students of the survey confirm having learned more than one skill in this way.

5. Video reviewing is vital for mental intake of content and mastery of the skill.

6. Viewing more than one video is essential in the skill learning process.

7. A good majority of respondents 82.95 % are satisfied with their experience of skill acquisition. This opens a very big window for skill learning and the future VBL in general.

8. Skill learning which uses VBL and is an SDL has many shortcomings stemming from both VBL and SDL. Skill learning will reach higher ranks when the technical inadequacies of VBL and the inherent drawbacks of SDL are addressed.

9. In the end, the results of the survey reflect a tendency among students as a category in the population to use videos notably. Practice by students confirms the theory that video-based learning is a fact which proved its efficacy as 83 % of them estimate that online video-watching has at least a "medium" if not a "high" or a "very high" importance for them. Finally, the study has shown that skill learning by the means of videos, because of wide practice, the trend for it is to turn into a habit for this category of respondents and the population at large.

Conclusion and suggestions

Coming with the digital revolution, video is undeniably becoming a part of people daily life. From entertainment to education, video is watched everywhere and used in every field. It is used in education as a complement in class or independently at home. This paper explored the use of video in learning skills. It first exposed the great explosion in the use of video and stated its inherent characteristics such as auditory and pictorial feature. Other advantageous traits like chunking or repeat, stop, rewind were also investigated through the different research works undertaken in the field.

In the same way, learning theories were dissected because VBL is grounded on principles underlying these theories. Cognitive load, intrinsic load, and extraneous load are concepts of cognitive theory Mayer expanded to VBL. Self-reliance and strong motivation are known to drive adult learners in their search for learning. This fact underpins SDL and video designers have to consider it when devising learning material for this category.

The other part of the paper focused on the discussion of many points resulting from responses to the survey questions. Analysis of student responses revealed that video viewership of the greatest majority is at least medium. Now as far as purposes of viewing video, the survey showed that skill learning is at a head position after entertainment and school tasks. The survey confirmed users appreciation of features like audio/visual, signaling, and the stop, repeat, rewind function. The favorite duration in a learning video has come as a match of preferences published in the literature.

Most importantly, results showed that students not only learn skills via VBL but a sizeable number of them learned quite a few skills in this way. In their journey of skill learning, respondents declared that they do take advantage of the repeat feature in a video to learn it. They affirmed too that they frequently need more than one video to master their skill. In this way, the conclusion is that Algerian young students do not only learn a skill by the means of online video, but for many of them it is becoming a repeated practice.

Research responses also demonstrated that skill learning, a primarily an SDL type of learning, suffers from shortcomings. As an SDL, it still necessitates the presence, if not of a teacher, of a facilitator. Research has to be directed especially in video design to improve video efficiency to reduce further the need to human presence of the teacher or facilitator. With such improvements, video will be more reliable and will gain a consolidated position as an educational tool.

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