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Student Engagement with Specialised Videos in Higher Education

A Look at Video Education today with a Studious Digital Education Case Study

100223285
University of East Anglia

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ABSTRACT

Over the past few years, student engagement has been increasingly linked to positive learning outcomes. Therefore, this Media studies research aims to explore student engagement with specialised videos in higher education from an interdisciplinary perspective, drawing on literature from the disciplines of Media Studies, Education, Computing, Business Studies and Psychology. This research uses a new UK based e-learning media provider as a case study. The term “specialised” will refer to the company’s use of high-quality filming resources, academic storytelling and visual animation. To measure student engagement, the researcher will utilise a variation of the NSSE (national survey for student engagement)’s Online Student Engagement scale (OSE) which benchmarks four factors of student engagement: skills, emotion, participation and performance. The research will also identify video-based education platforms used by students during their undergraduate studies. Study findings will be useful to media professionals and academic institutions looking to provide students with engaging academic media.

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LIST OF ACRONYMS

HE: higher education

High ed: higher education

MOOC: massive online open course

SM: social media

Advert: advertisement

YouTuber: content creator on YouTube

Insta: Instagram

OSE: online student engagement

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1. INTRODUCTION

a. Research Background: the world of visual media in learning

With the widespread popularity of online technologies reaching new heights in the past years, media has become an important component of learning. Various forms of media have become a staple in day-to-day information transmission. Although advances in teaching approaches often depend on variables such as culture, economic situation, geographic locations, an Australian study highlights that there are three milestones of digital technologies which are most prominent in the context of learning (Howard, 2015). In the past century, these advancements are outlined as pre-digital – film, radio and television (Howard 2015). Since then, most people have become not only familiar but also quite well acquainted with the internet (Brändström, 2011). Consequently, with the continuous progression of the online sphere, the most recent digital tech 'milestones' introduced are smartphone applications and web applications (apps).

One Malta based study asserts that digital learning technologies such as apps, hold "great potential to improve the students' knowledge and skills in an informal manner" (Camilleri, 2019). This is due to the general nature of education apps which are able to provide instant access to learning resources. This instant access has been found to improve overall student experience (Camilleri, 2019). While 'experience' has become somewhat of a buzzword in both education and the business world, there is limited evidence to 'experience' its durability and to its relation to student engagement.

With that said, we are seeing a rise of e-books, online communication platforms, learning technology and video-sharing – all being integrated in education in various ways. Diving into the academic wealth of knowledge in the fields of digital media and education, it is clear that there is plenty to be found on the topics of digital media literacy in teaching, student engagement in higher education generally and the effectiveness of game-focused educational apps as well as blended learning. While all mentioned subjects are vital to our understanding of the growing digital atmosphere, there is limited academic writings on the use of a basic, and some might argue even essential form of

media, in higher education; video. Videos are often considered a form of entertainment, therefore, can education be entertaining when presented in videos?

An article by Forbes reveals that Youtube's most viral videos fall within the category of education (Hua, 2015). The report highlights that while YouTube is classically known for its quirky animal and pet videos, educational videos are actually viewed twice as much as others. Similarly, a 2018 study by Pew Research Center reveals that 51% of YouTube users use it for learning purposes of all kinds (Smith, 2018). This includes academic content under subjects taught in schools and universities. With that said, Sherer and Shea used YouTube videos to assess learning and engagement. They concluded that videos from this site, "engages students in their learning, energise classroom discussion, and meet course learning" (Sherer and Shea, 2011, p.56). However, it is important to note that integrating such videos did come with a cost. Sherer and Shea mentioned that it is often difficult for both students and teachers to find a suitable and effective video among YouTube's pool of 70 billion options (Sherer and Shea, 2011, p.57).

With such strong evidence on the demand for educational videos online, it is no surprise that platforms hoping to solve this began to appear. Platforms began to explore ways to provide learners with video learning. Online platforms such as edX, Lynda and FutureLearn emerged, all with the promise of free video-focused learning content that is partially free. These courses were designed for those who either have a limited background in the subject or would like extra support in their studies. While it is said that hundreds of universities are signed up to such platforms, research has found that in these open online courses, "completion rates are disturbingly low" (Sinclair and Kalvala, 2016, p.1). It is relevant to note that videos created for these online courses are taught by academics; however, they are created for general audiences rather than personalised to suit university curricula at hand. What would student engagement look like if video content was produced using high quality filming resources to match students' in-classroom room learning? – where the goal is not necessarily course completion, but engagement and learning enhancement. Currently, available research has not focused on the latter (curated video learning created to support elements of a taught course at a HE institution). While this study examines which MOOCs are

commonly used by students, it also assesses specialised videos and whether similar issues arise with engagement.

Studious Digital Education is a new social enterprise that aims to create digital content for the higher education sector. It provides a range of services including creating bespoke digital learning courses, producing academic films and videos, offering ready-made online educational content and creating a digital learning experience app, Ryze. This app combines personalised written content, videos, podcasts, gamification and progress tracking (Studious Digital Education, 2019). This venture was created by a group of academics seeking to develop e-Learning resources for undergraduate and postgraduate students (Coast Digital, 2019). While this company offers a range of opportunities for the higher education world, its approach to video creation is unique because it combines the oversight of academics alongside professional videographers, animation experts and e-learning technologists. The social enterprise aims to bring a new meaning to education as entertainment by creating cinematic style case studies, features, show-reels and animated explainers.

For the purpose of this study, the researcher will use Studious Digital Education's specialised digital videos to assess their impact on Business student engagement at the University of East Anglia's Norwich Business School. This Media studies project aims to explore this topic from an interdisciplinary perspective, drawing on literature from the disciplines of Media Studies, Education, Computing, Business Studies and Psychology. This approach is due to the multi-faceted nature of Media studies when linked to student behaviour in higher education. Due to this connection, Psychological, Educational and Technical expertise are vital to consider when student engagement in at the forefront of the conversation. Additionally, since the videos being studied are Business centric, literature from Business journals are also utilised to highlight any relevant considerations or nuances. Ultimately,The purpose of this research is to gauge engagement levels linked to specialised high-production video content in consideration with other widely available video-based platforms. Doing so will help link the most likely forms of engaging educational videos linked to positive enagement results as well as bring light to other video learning platforms preferred by students in this study.

b. Research Aim, Objectives and Questions

This study sets out to explore the current world of academic video content in higher education and assess the engagement of Studious Digital Education's specialised videos from a student perspective. A digital media study from the University of Denver states that, "achieving effective learning via digital media continues to be a major concern in contemporary education" (Chien, 2012, p.2). However, while previous literature has delved into the subjects of student engagement in entertainment based video-sharing platforms such as Netflix, YouTube, Tiktok and more, there is a deficiency in knowledge on academic and specialised video content's role in the matter. Therefore, the aim of this study is to investigate student engagement effectiveness of specialised academic video content in the higher education sector at the University of East Anglia's Norwich Business School. The study also strives to uncover insight into student platform preferences for video learning.

The term "specialised" will refer to the e-learning company's use of specialised filming resources, academic storytelling, visual animation and professional editing to bring together the media.

Consequently, the research problem that will be explored is the following: Do specialised academic videos garner measured high engagement levels and learning outcomes for students in higher education?

Results of this research will allow both academics and practitioners interested in education to further understand the possible value of video usage in teaching. It will be particularly useful to media professionals and academic institutions looking to provide students with engaging academic media that appeals to them. Finally, primary research into which video learning providers students utilise for their hobbies versus for their higher education learning will provide additional insight into what platforms students find most appealing and why.

Research Objectives	Research Questions
To assess the current field of online (video-based media) platforms containing educational content	What are the educational video platforms commonly used by students? Why are these sought after?
To compare between educational platforms more geared towards education vs those more marketed to enriching one's personal skills and hobbies.	What platforms of video learning are UEA NBS students more engaged with and why? Do students use different platforms for different reasons?
To identify student engagement levels with Studious Digital Education's academic videos	How effective are specialised video content in capturing student engagement?
To discover and suggest the most effective video production approaches to integrate in UK universities.	Are specialised high quality videos a possible route to increased student engagement with academic videos? What learning outcomes can be affected by video engagement?

2. LITERATURE REVIEW

a. The Rise of Digital Video Media

One of the first significant shifts in digital video media in relation to this study was online streaming. In 2005, Google introduced a free video hosting service, Google Video (Raman, 2006), (Figure 1). Google Video allowed users to upload video content to Google servers, alleviating worries about storage and internet speed (Raman, 2006). However, since all videos uploaded to Google Video were available to publicly watch for free, many copyrighted media and monetised videos (such as music or teaching material) could not be a part of Google Video. As a result, shortly after launch, Google created the 'Google Video Store' where creators can upload their videos with a charge for users to purchase in order to download and watch (Raman, 2006). While Google Video began to gain traction since its launch in January, YouTube entered the scene 3 months later in April as an online platform for sharing and uploading videos (Soukup, 2014).

Figure 1: Google Video in 2005 (Reese, 2020).

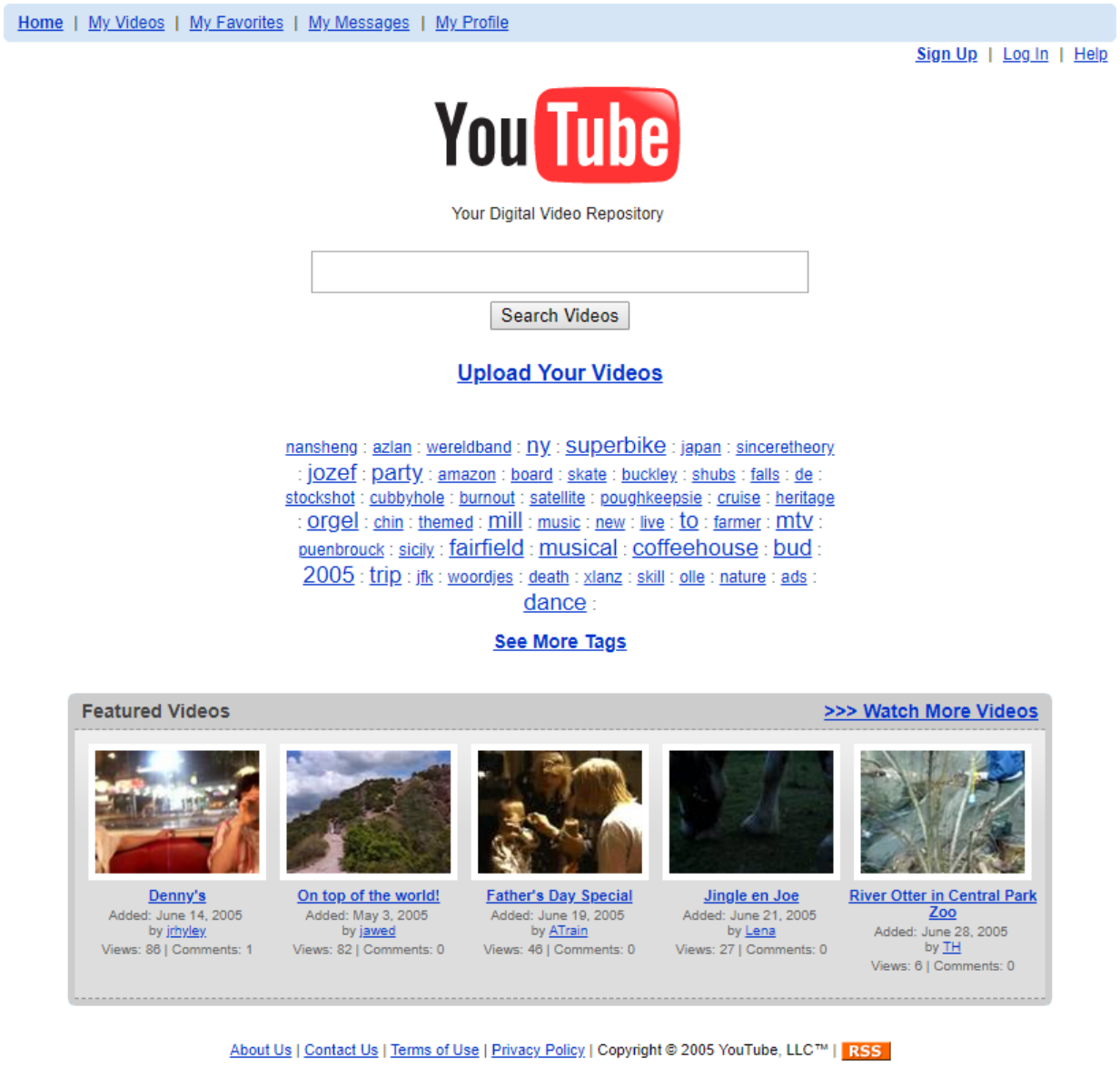


Figure 2: YouTube in 2006 (Reese, 2020).

YouTube was created by three PayPal employees with the main goal to initially provide an accessible space for non-tech experts to upload videos to the web (Burgess, 2018). Therefore, the main goal was not for cultural or social media reach, but rather, to help bring regular internet users closer to video sharing. Despite this humble approach, YouTube started gaining high numbers of users daily. By the following summer of 2006, YouTube was gaining 100 million video views per day from its visitors (Raman, 2006), (Figure 2). Consequently, by Fall time (October 2006), Google acquired YouTube for

$1.65 Billion (Scooter, 2020). By this time, it was obvious that YouTube was the leader of online video streaming and Google wasted no time to buy it. So, what set YouTube apart from Google Video and why didn't Google Video achieve similar success? Was Google Video a failure?

Marketing specialist and online personality, Neil Patel weighed in on the Google Video success vs failure debate. Patel asserts that Google Video was not a failure, but simply that it didn't solve any particular problems at the time to push it to YouTube level success (Patel, 2021). While YouTube solved the issue of connecting video creators on a platform and allowing them to upload videos, Google Video focused more on producing a good 'video player' that could also work offline for downloaded paid content (Patel, 2021). In addition to having free video uploading and no fees, two features YouTube had combined was; basic social functions (adding 'friends') and HTML codes for creators (and viewers) to share these videos on blogs, websites, articles, etc (Burgess, 2018). These combined features were not found on other platforms at the time. Thus, YouTube had developed a formula which was a mixture of social networking, content uploading, content sharing and advertising and marketing all at once (Soukup, 2014).

Authors of the book, *YouTube Reader*, also praised YouTube for its ability to bring people together. They said, "YouTube.com—a free, public, online video archive with built-in social networking features—has created a platform for countless virtual communities, many of which are focused on transmitting knowledge in users' areas of interest and expertise" (Snickars and Vonderau, 2009). Today, YouTube creators upload hours of video content per minute and internationally, it receives more than one billion hours of video views per day (Goodrow, 2017).

Figure 3: Netflix domain in 2007 (Netflix About, 2021).

The next and final milestone in this section is the second form of video streaming: viewing only, rather than uploading and hosting as well. On January 15th, 2007, online movie rental service, Netflix, introduced a video streaming service (Figure 3) called ‘Watch Now’ on its website (Labato, 2019). At the start of this new business model, the ‘Watch Now’ service only offered 1,000 films to pick from and the streaming was restricted to PCs and the Internet Explorer browser only (McFadden et al., 2020).

However, it was soon clear that online streaming services were the future of online video. By the end of the year, Netflix had 7.5 million users and multiple competitors in video streaming began to emerge. These included Hulu, HBO, Hayu and most recently, Disney+ (Lobato, 2017). Streaming has allowed consumers to be more in control of their watch schedule. This includes what it is they choose to watch and at any time they please. While live scheduled content can still only be viewed at the set time, once the programme has been televised, in most cases, it becomes instantly accessible to viewers whenever.

b. Video Media for Communication

Now that the history and recent developments of video media have been discussed, it is relevant to highlight the role video plays in communicating (or miscommunicating) information. What do we know about this medium of communication from past research? There seems to be a lack of literature regarding videos as a medium for communicating information generally. Available literature on this topic tends to focus on delivery of information in clinical studies and engineering. However, the limited writings available will be explored in this section.

A 2007 study discusses visualisation of scientific concepts and how they compare to written delivery when delivering information (Korakakis et al., 2009). Korakakis argues that images can function as symbols of concepts which render information easier to comprehend than those in writing (Korakakis et al., 2009). Additionally, the study also taps into memory by explaining that images are in fact more effective in delivering information that can be retained for longer in one's memory (Korakakis et al., 2009). This is due to pictures having "stronger associative perceptual information than that of words" (Korakakis et al., 2009, p. 392).

Consequently, another primary factor of video media is non-verbal communication. Non-verbal communication is defined as "body language and everything we communicate besides the spoken word" (Kraus, 2011, p.690) This could also include tone of voice, gestures, appearance, facial expressions, posture, attire and more (Brown, 2006). Unlike written text, videos can offer the viewer a look into various, if not all, forms of non-verbal communication which can occur simultaneously while speaking or with no verbal prompts at all. According to a 2014 study into understanding complex visual content, visual cues are an effective method of retaining human visual attention in videos (González-Díaz, 2014). These visual cues can be in the form of objects or pointing to objects (or text) within a video (González-Díaz, 2014).

One US based PR company in the healthcare and tech industry goes one step beyond considering video communication against written communication by weighing it against *all* forms of communication. Scott PR asserts that video is the 'perfect' medium to deliver messaging because it not only caters to the average human's attention span,

but also satisfies people's natural tendency to be attracted to visual prompts (Scott Public Relations, 2021). How can a PR company be so confident in the best possible medium of communication to use for its consumers? The answer is science. According to MIT research in Neuroscience, half of the human brain is directly or indirectly devoted to processing visual information (MIT News, 1996). This visual information processed by the brain includes the non-verbal communication. When a video is presented to a viewer, he or she is able to utilise a large portion of their brain processes to not only take in the information being delivered, but also the tone of voice and visual cues presented. This brain processing however, is generally dependent on the environmental factor and lack of distraction at that given time. While video is indeed proving to be a powerful player for information sharing, it is certainly circumstantial.

Another research backed by science which has given Scott PR its confidence in video communication is one from the University of Minnesota. This study compared a select number of presentations with no visual support with a number of presentations that included visual material such as graphics, images, text visuals, etc (Vogel, et al., 1986). Researchers found that the audience was 43% more persuaded by the visual presentations than the text-only versions (Vogel, et al., 1986). Accordingly, it was revealed that the reason behind the increased persuasion was due to more positive opinions about the presenters with visual slides (Vogel, et al., 1986). Audience members considered those presenters "more concise, clearer, making better use of supporting data, more professional, more persuasive, and more interesting" (Vogel, et al., 1986, p.4). Again, while this is a positive outcome for visual communication, it is relevant to note that it comes with its limitations. In order to receive a positive reception as the audience in this study demonstrated, it is fair to consider that the visual elements presented must be ones which are appealing, favourable, relevant to the media or all of the above. Presenting unappealing visual support may have adverse effects on the

viewers.

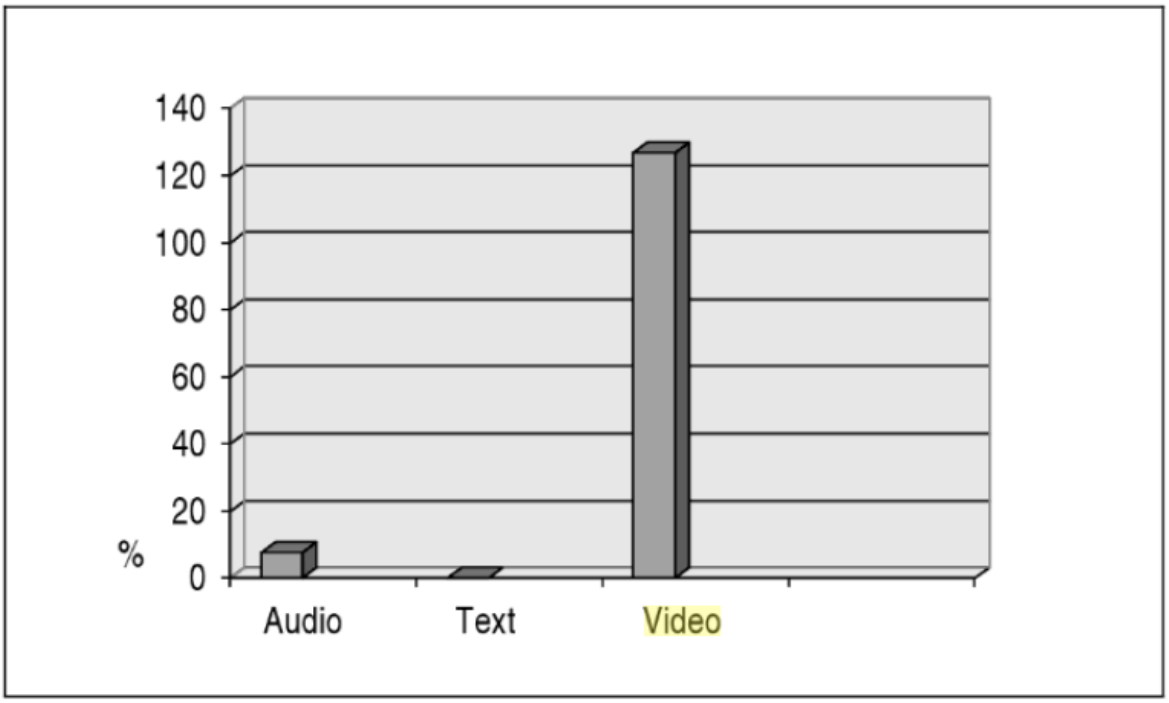


Figure 4: The percentage increase in correct answers (Beattie, 2003, p.189).

With that said, while the goal in this section is to identify effective communication rather than persuasive communication, it is an interesting discovery. It also begs the question: what about auditory aids? Until this point, comparisons for messaging and communication were mainly between written text and video. However, what is the case when factoring in audio as a competitor for ease of communication? In *Visible thought: The new psychology of body language*, Beattie discusses analyses of video, text and audio in performance engagement. The study separated participants into three groups and presented each group with the same set of information followed by a number of questions (Beattie, 2003). However, each group was presented the same information in a different medium of delivery. The first group was presented with a text version, the second group was presented with an audio and the third group was presented with the video version. Despite all three versions containing the exact same wording of information, the outcome revealed that far more questions were answered correctly by members of the group who watched the video version (Beattie, 2003, p.188). The

increase in percentage of correct answers from watching the video version was around 125% (Figure 4). Although the method used for this study is a useful approach to comparing communication and information retention among media forms, there are certainly limitations to these findings. The study highlights that in the video version, the speaker performed some gestures which emphasised the information spoken, and thus, might have helped indicate what the answers for the coming questions will be. Regardless, when researchers followed up with participants three months later, it was still the video group who were able to recall and answer the questions correctly! (Beattie, 2003). Therefore, it could be inferred that video communication indeed plays a strong role in delivering information.

However, not all non-verbal communication is beneficial communication. Oftentimes visual communication in the form of videos can be distracting. For instance, too much gesturing or body movement can hinder a viewer from focusing on the verbal communication (Woodall, et al., 1981). Additionally, varying changes in pitch or tone of voice can render the spoken material more or less intimidating (Woodall, et al., 1981). Ultimately, there is no perfect formula for information delivery in videos (yet). However, these studies are great steps towards discovering effective and non-effective approaches. With that said, it is relevant to keep in mind that different students have different learning styles.

Moreover, one thing that researchers have discussed widely is the extent to which books can induce emotions in readers. One research in the psychology journal *Cognition and Emotion*, cites the emotional reputation of story books. This study describes emotions as being the primary experience of storyline novels (Mar, et al., 2011). Mar lists emotions as well as reactions such as ‘sadness, tears, smiles and laughter’ as characteristics of a ‘good book’ (Mar, et al., 2011, p.818). In fact, emotions induced by literature are said to be so powerful that it may last hours or even days after reading it - and may remerge again if the book is resurfaced in one’s thoughts (Mar, et al., 2011). Similarly, deep and long-lasting emotional responses have also been found to be induced by music and art as well (Robinson, 2005). Various forms of Art, Music and Literature at sight, have all been found to invoke a range of physiological responses

in emotion for humans (Robinson, 2005, p. 31). Therefore, do videos carry any emotion-inducing potential?

In the 2018 book, *Communicating Science and Technology Through Online Video*, the authors consider that online video has created a new sense of connection between consumers and media. They called this, 'participatory culture', a term introduced by media scholar Henry Jenkins (Leon and Bourk, 2018). This is described as new technologies propelling, "a new relationship between media industries and consumers" (Leon and Bourk, 2018). Additionally, Leon, et al, compare this term to a 'Do It Yourself' culture in which consumers play a role in the production, distribution and interpretation of the media content.

In *A History of Video Art*, Meigh-Andrews argues that the emphasis on video prevailing as an active medium of communication depends on rapidly changing technology. This is important to consider for the 'artists' or content creators as well. Meigh-Andrews says, "the development of video as a medium of communication has been, and remains heavily dependent on technology, and the activity of artists is inevitably as dependent on the same technological advances" (Meigh-Andrews, 2013). So, how far do we think video as a popular form of communication will last? Meigh-Andrew's writings suggest that video may prevail only until a more interesting and engaging form of visual technology emerges, which can capture attention and deliver information more effectively. This can include any new form of visual technology such as virtual reality, holograms, etc.

c. Social Media's Role in Video Trends

It is often the case that a great way to track trends in technology is to have a look at social media platforms. For years, Instagram, primarily a photo-sharing smartphone application, has reigned as the social media king for years (Haenlein, 2020, p.5-25). Users flocked to this smartphone app to share still snippets of their life. In fact, upon its launch in 2010, the first ever instagram post was a casual photo of a beach harbour in the late afternoon on July 16th, 2010 (McNely, 2012), (Figure 5). This first photo was posted by one of the Co-Founders of Instagram and it set the tone to Instagram for

many years to come. Between 2010 and 2013, Instagram was utilised solely for not just photo sharing, but the kind of photo sharing that can be considered ‘day-to-day’ or ‘lifestyle’. (Prilyantinasari, 2020). Calishain suggests that Instagram became so ingrained in frequent posting of daily activities that Instagram could be used as a vessel to study cultural content curation (Calishain, 2019). The likes, trends, preferences and buying habits all became a part of what researchers can derive from this social channel. Consequently, Tyer compared what non-social-media-influencer female users enjoy to see on Instagram versus what they post on to their personal Instagram accounts. This study revealed a strong dissonance between the media participants consumed on their Instagram and the content they post themselves (Tyer, 2016).

However, although the accounts followed by the participants does not seem to be influencing what they are posting, it can be influencing other invisible factors such as preference towards image styles, products, trends, idea of aesthetics, etc. Although all such factors mentioned are not confirmed in one collective study, Prilyantinasari used quantitative probability to discover that in a sample of more than 100 young participants, it can be found that frequent exposure to hedonic lifestyles on Instagram impacts users' daily life (Prilyantinasari, 2020). More specifically, a York University study outlined that social media, and Instagram in particular, is negatively affecting the way digital consumers are viewing their bodies (Hogue, J, 2018 and York University, 2018). With Instagram’s impacts reaching such heights in terms of body image and sales consumptions, it is no surprise that it also can affect video trends.

In 2013, Instagram introduced a new feature to its still photo-sharing platform - the video. After two and a half years, Instagram’s Co-founder, Kevin Systrom, released an article onto their official blog, stating that, “Some moments, however, need more than a static image to come to life. Until now these stories have been missing from Instagram” and introduced the new feature (Systrom, 2013). At this time, Instagram allowed users to upload or film up to 15 seconds of video - a big milestone for Insta lovers. Since then, Instagram has grown from the 15 second video to one minute videos then to today’s 60 minute videos courtesy of ‘IGTV’ (Instagram TV), (Systrom, 2018). With that said, despite Instagram’s ability to leave big marks in the 21st Century patterns of photo trends, it has not left much impact on video trends.

Figure 5: First ever Instagram photo (@mikeyk, 2010).

In 2016, the “largest and fastest” growing mobile data traffic segment was video (Morena, 2016, p.1613). This large growth of video consumption on social media was attributed to Vine, a Twitter owned short-video platform and Facebook video (Morena, 2016). These video players accounted for more than 50% of worldwide mobile traffic and usage (Morena, 2016). YouTube played a big role in video trend making such as ‘morning routines’, night time routines’ ‘favourites’ and viral ‘challenges’ (Ferchaud, 2018), the video trends tended to be replicated and consumed within the YouTube community and platform primarily (Weaver, 2012). However, short six-second videos such as those produced on ‘Vine’ were quickly proving to be more memorable, engaging and more likely to be watched than the average videos on other social media apps (Yarosh, 2016).

A US study from Bentley University considered this phenomenon from the perspective of the video maker. The study aimed to check the extent to which these micro-videos can be useful in education. Various participants were asked to create Vine videos to demonstrate an educational concept in Technology. Findings revealed that this activity inspires elevated critical thinking and creativity (Frydenberg and Andone, 2016). This is because the creator needs to consider how to include a useful and educational narrative while still utilising visuals to create a compelling video (Frydenberg and Andone, 2016). An earlier study assessed 3,800 Vine videos that have been categorised by viewers as creative and non-creative to try to uncover some primary ingredients surrounding what a creative video is. Researchers found that the most persistent factors among 'creative videos' were aesthetic value and novelty (Redi and O'Hare, 2014). The study defines aesthetic appeal as one of many options including sensory features (filming technique), emotional affect (visual and audio) and intellectual appeal. This project is useful to consider throughout this study since it focuses on what the user ultimately deems as a successful Vine, which is the award of creativity. Throughout this research, the 'award' in question is student engagement. However, maybe novelty and aesthetics might be factors worthy of contribution to engagement as well.

With that said, despite the wide-reaching success of Vine, it came to a sudden end in 2016. During that year, Twitter announced that Vine was shutting down (Rogers, 2016). According to Twitter executives, Vine was not profitable to Twitter and the large-scale creators were starting to find other platforms where they can actually earn more money while reaching more users…such as Instagram video and YouTube (Rogers, 2016). This might have not been a big loss for the Vine influencers who were already moving on to YouTube, however, it was a disappointment to millions of Vine users who clearly enjoyed and engaged with the micro-videos. The words "Vine is Dead" were everywhere, spready by the fandom following the announcement (Gularte, 2019, p. 43). Vine was gone but not forgotten. Thousands of Vine users took time to download, save and re-upload Vine videos to other platforms such as YouTube, Facebook and Instagram (Gularte, 2019). Much to content creators' dismay, they did not benefit monetarily nor were they credited in most of these re-uploads (Gularte, 2019).

While the social media world has gone quiet in regards to micro-videos since Vine shut down its doors, another catering short videos platform launched globally in 2018. This platform, Tiktok, has garnered no less than 800 million users sharing more than 37 billion videos (Basch, 2020). This app which allows users to create, edit and publish videos became so globally demanded that it was no surprise when it surpassed Instagram in popularity in October of 2020 (Rodriguez, 2020). Just two years ago, it was common to see teenagers hurrying to catch the perfect “Insta shot” (referring to capturing the most appealing photo for Instagram). Now, we are met with the phrase “let’s film a TikTok!”. The TikTok craze continued into the new year, surprising many when it surpassed Google as ‘most popular website of the year’ at the end of December, 2021 (Tomé and Cardita, 2021). TikTok was followed by Google, Facebook, Microsoft and Apple in the rankings (Figure 6).

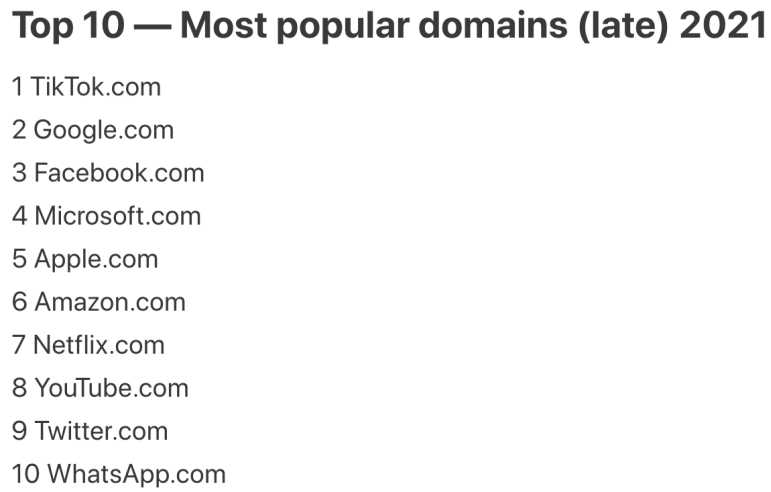


Figure 6: First ever Instagram photo (Tomé and Cardita, 2021).

So, what does TikTok constitute? TikTok initially allowed users to create videos of up to 15 seconds only (Wang, 2020). Since then, the app has expanded to allow users to post singular videos of up to three minutes long (Kastrenakes, 2021). According to a 2020 research into short-form video apps, TikTok provides a unique experience due to its ability to offer ‘rich information’ through short videos containing text, image, audio and video (Song, 2021). Additionally, its ability to combine such modalities with factors including commenting, chatting, following, liking and live-

streaming has also played a role in its success (Song, 2021). In ‘Communicating COVID-19 information on TikTok’ Li, Guan and Hammond cited high levels of user engagement in relation to videos conveying information on COVID-19 in May 2020 (Li, Guan and Hammond, 2021). Research found that among the 331 videos examined, the ones which emitted the most alarm and concern had higher engagement (Li, Guan and Hammond, 2021). It is important to note that in this case, engagement was measured by numbers of views, likes, comments and shares. This is interesting to know because it concurs with this paper’s online student engagement model which instead looks at skills, emotions, participation and performance as modes of study. However, it is indeed very different contexts because TikTok is a social media platform with live users whereas this paper looks into student engagement with videos which is harder to pin down.

With that said, in the field of Health, researchers have attributed engagement to the, “originality, interactivity and social nature of TikTok” (Song, et al, 2021, p.2). Song, et al, have praised TikTok for giving users a ‘better experience’ than other video platforms and heightened engagement when searching for health-related information due to its short and snappy content (Song, et al, 2021, p.2). Ultimately, both micro-videos (in the second mark) and short videos (up to three minutes) are in themselves a form of video trends which are taking over the online video sphere. With Youtube not even making the top 5 most visited websites or climbing any charts at all frankly, there comes the question of whether TikTok is a new mode of video consumption?

When it comes to Education, TikTok is no stranger. The Chinese video app has begun commissioning universities to produce thousands of educational videos for its platform in an effort to increase ‘micro-learning’ and excite global learners (Iqbal, 2020). However, that is from the platform’s end. When looking at the educational opportunities available with TikTok from an academic lens, there are various things to consider. In a recent study, Khalif and Salha (2021) describe TikTok as a mechanism providing ‘nano learning’ (Khalif and Salha, 2021). Here, nano learning is described as the “condensing of micro-content into small units that are controlled and delivered by learners to achieve a single learning objective” (Khalif and Salha, 2021, p.2). The small units here are of

course, referring to the short videos. The authors describe TikTok as being a strong potential vessel of delivering e-learning particularly due to the creativity in which short time-frames induce or require of the content creator. Interestingly, the focus here is to encourage content creators to create more engaging content rather than chopping videos into smaller units to produce more engaging outcomes from viewers. A second 2021 Education study highlighted the heights to which TikTok soar in usage during the COVID-19 pandemic and aimed to research its potential in higher education, particularly Sport Sciences. The project utilised a mixed research method to assess the effects of TikTok learning videos on students. Escamilla-Fajardo et al (2021) cited the following results:

- promotion of student motivation
- creation of an engaging learning environment
- encouraging the increasing development of skills including creativity and curiosity (Escamilla-Fajardo et al, 2021).

Despite the positive input in academia regarding TikTok use for higher education, multiple sources have cited that one of the primary challenges that remain is that this social media channel still faces some resistance from ‘older generations’ (Draganic, et al, 2021); (Azman, et al, 2021). Where it stands now, the largest share of users in the UK are aged between 18-24 years old (Social Films, 2021). The second age category goes to users aged 25-34, and the numbers continue to decrease as the age segments add up (Social Films, 2021). Some researchers suggest that the possibilities for TikTok to be a revolutionary e-learning tool will increase rapidly as the generations growing up with TikTok grow up and embark on their HE journeys (Draganic, et al, 2021). Currently, the highest demographic of users in the UK are at a university age, so it can be argued that now is the time to begin utilising this medium and testing its effectiveness possibly on Business students across higher education institutions.

d. A Look at Online Video in Learning

What do we know about video technologies in education? According to a 2015 study on video effectiveness in learning, “The increased use of video as a teaching medium is encroaching onto traditional face-to-face teaching in Higher Education. This affects lecturers, students, Universities and Colleges and there is a need to bridge the gap in digital competencies” (Woolfit, 2015, p.4, Jacobs, 2013). So how are videos being incorporated in learning? What video learning platforms are available? This section explores the use of videos (and online videos) in learning environments and practices. It will also examine the various online video learning platforms available to students and discuss these platforms in the context of usage, safety and commercialisation.

Not only is technology evolving at fast speeds daily, but it is also the case that many of today’s learners have grown up with such technologies around them (Duncan, et al., 2013). Those who grew up with internet access and social media are often referred to as ‘millennials’ and the ‘net generation’ in literature (Duncan, et al., 2013). The National Library of Medicine defines the net generation as, “the cohort of young people born between 1982 and 1991 who have grown up in an environment in which they are constantly exposed to computer-based technology” (Sanders, et al., 2007). Additionally, Gen Z, which are the following generation born starting 1997, are said to have closer ties with the internet and particularly online media. This is because the internet was already in its established stages when Generation Z consumers were old enough to comprehend digital technologies (Szymkowiak, 2021). In fact, according to a study by the Center for Generational Kinetics in 2021, 72% of Gen Z utilise the internet primarily for entertainment in the form of videos, apps, message boards and more (The Center for Generational Kinetics, 2021). Whereas, previous generations use the internet more frequently to access information (The Center for Generational Kinetics, 2021). This is interesting because it suggests that Gen Z students may be more likely to obtain video media for entertainment purposes rather than seek out academic media, whereas Millennials may be more likely to seek out academic information online, whether it is in the form of media or not, the study does not specify.

Thus, the majority of students find that tech integration into their studies is not only attractive, but often what they expect (Duncan, et al., 2013). With that said, it was not long ago when professors and consultants in Education were weighing whether technology should even enter the field. In 2005, two experts in education discussed the criticism institutions are receiving for incorporating PowerPoint presentations and technology applications into learning (Sherman and Kurshan, 2005). In their book, *Learning and Leading with Technology*, they state that many are questioning what the added value is for including slides and computer-related tasks (Sherman and Kurshan, 2005). To answer this, the authors highlight a couple of advantages to tech-based teaching. These are summarised in the following points:

- web-based research databases allow both students and teachers to access additional learning resources (Sherman and Kurshan, 2005).
- Students can receive language lessons and activities that are relevant to their cultural experiences (Sherman and Kurshan, 2005).
- Students can, “organise their knowledge using computer-based tools and software simulations that model forming and expressing alternate conceptions of concepts and strategies” (Sherman and Kurshan, 2005, p. 2005).
- Students can focus on their thinking while also looking for information (Sherman and Kurshan, 2005).

Despite such positive opinions about the integration of technology in learning, it was not an easy task in the early 2000s. Introducing these innovative approaches required sufficient training, professional development and technical support (Ross, et al., 2001). This was both a time and money costly process that not all institutions could enforce. As a result, teachers were frequently blamed for being unable to provide the most up to date methods of learning and relevant resources (Ross, et al., 2001). While it is often still a constant debate who exactly it is who must make the decisions on evolving technology integration in institutions, Ross, et al., points out that it is the job of the school leader to be informed on how educational technology can impact students, staff and stakeholders - and thus, create the relevant strategy to meet learning and teaching goals (Ross, et al., 2001).

Moving on to video-specific integration, there has certainly been a rise in the use of videos in educational settings over the past ten years. According to a 2019 Australian study into higher education, the hike in both video creation and usage can be attributed to the sheer accessibility of such videos as well as the now low production and storage costs to make an average instructional film (Fyfield, et al., 2019). A 2016 study from the *Journal of Life Sciences Education*, cites the use of videos as an important part of modern day higher education (Brame, 2016). The research describes education focused videos as the cornerstone of blended learning and the primary teaching method of online and distance learning (Brame, 2016).

Moreover, how far back can we trace back online videos being used in tertiary education and individual learning? Educational films have been around since as early as 1897 in St. Petersburg, Russia (Prokhorov, 1979).The 1990's were also known for the occasional classroom instructional and social awareness videos, filled with exaggerated tones of voices and a surplus of information (Lawson, 2006). However, it was not until 2005 when educational videos entered the online realm (Karppinen, 2005). During Spring of this year, YouTube was developed, which created an organic user-led community of users uploading learning and instructional videos to the platform (Karppinen, 2005). From recorded lectures and professor-led informational videos to student projects and presentations, YouTube became a hub for both teaching others and gaining knowledge as well (Juhasz, 2011).

According to a 2017 research into social media, it was found that one of the top three motivations for people to use YouTube is for 'academic learning' (Moghavvemi, et al., 2018, p.37). In this case, academic learning refers to learning that is connected to subjects taught in schools and tertiary education (Moghavvemi, et al., 2018). The other two identified motivational factors for tuning into YouTube were entertainment and information seeking (Moghavvemi, et al., 2018, p.37). With both 'information seeking' and 'academic learning' being among the top reasons for the use of YouTube, it can safely be considered that YouTube was the shaping ground for many video learning platforms to come.

i. Effectiveness of Online Video Media in Learning

Once the beginnings of online video learning have been identified, one must consider the outcomes (or lack-there-of) for using this medium of communication. This portion of the literature view shines a light on academic writings surrounding the use and effectiveness of this approach to learning. A 2009 study into Multimedia, compared between auditory and visual cues to test retention (Johnson and Mayer, 2009). This study found that visual cues are far easier and more likely to be retained in the memory than auditory cues (Johnson and Mayer, 2009). This outcome coincides with Beattie's 2003 research which found an increase in correct participant answers from the sample which viewed learning videos rather than learning audios (Beattie, 2003). These studies continue to support the argument that video media reigns over auditory media in retention and performance effectiveness.

Unfortunately, current literature into video effectiveness in learning has not gone into specifics regarding the different styles of video presentation utilised in the studies. For instance, a 2017 study in Education compared face to face learning and live video learning. The researchers noted that students who participated in the online video version not only responded more positively, but also consumed information at a faster pace (Graham, et al., 2017). This is interesting because it introduces a new aspect of video learning effectiveness, which could potentially be the speed at which a student or general life learner comprehends and takes in information.

While the above studies focus on online video effectiveness using isolated video learning, it is also vital to learn about video effectiveness as a supporting factor to traditional learning. One 2013 study published in *Computers and Education* was dedicated solely to testing online videos' association with higher or lower grades for undergraduate university students. The outcome showed significantly higher exam scores from students who used online videos of the same subject to support their studying (Dupuis, et al., 2013). However, it is relevant to note that this study was conducted on Biology students which restricts any assumptions towards different disciplines. With that said, another study published in the same journal just one year prior, uses a similar method to test the effectiveness of viewing video podcasts to assist

in Pre-Calculus classroom learning. The results here indicated “significant knowledge gains in Pre-Calculus concepts” and eagerness from students to watch more video podcasts for new learnings in their maths modular (Kay and Kletskin, 2012, p.619).

Consequently, since this paper will focus on specialised video in the field of Business studies, it is essential to look into studies undertaken within this area. In 2017, three experts in ‘Learning with Technology’, Lai, Zhu and Williams, teamed up to research how video tutorials affect learning enhancement for undergraduate level Business students. A sample of students were asked to watch video tutorials relating to their studies and then these students were asked to measure and describe the extent of benefits they gained or did not gain (Lai, et al., 2017). Researchers found that students whose final module grades were B and C, benefitted the most from the video tutorials because they were already struggling to comprehend the material (Lai, et al., 2017). Whereas students with final grades of A, D and F did not at all benefit from the video tutorial (Lai, et al., 2017). Lai, et al., suggests that the A students already had high comprehension of the material and the ‘D and F’ students would have required far more help than a couple of video tutorials to allow them to gain higher grades and an understanding of the subjects presented (Lai, et al., 2017, p.32). These findings raise an interesting point about whether all students should be presented with the same video learnings or whether these tutorials should be broken down into different levels to help serve various comprehension levels (for instance, beginner, intermediate and advanced levels of tutorials). However, this would require a wider conversation and research into how to identify which level of comprehension a student belongs to, in order to present each one with the appropriate video to support their learning.

Overall, the use of online video in learning seems to be a popular subject within literature. Additionally, they reveal a positive affinity towards online video learning as an effective method for information retention, improved performance, faster comprehension and high willingness to watch the media presented. However, these studies do not focus on the types of videos presented, but rather the medium of communication’s role as a whole in producing positive or negative outcomes on student performance. Consequently, most research studies look into particular subjects and unfortunately, Business is not a common subject within literature regarding online video effectiveness

for learning. Nevertheless, Arbaugh, et al who conduct research in online and blended learning in the business disciplines had already noted an almost 50% increase in blended learning within this field of study (Arbaugh, et al., 2009).

ii. Video Learning Platforms: Higher Education or Hobby?

As YouTube bloomed into success in 2005, the internet saw unprecedented growth of online platforms which partly or fully provide hundreds and thousands of educational videos. This section serves to discuss the top five 'best' video e-learning platforms which contain university level video content, as ranked by educational experts from Forbes (Delfino, 2020); (Friedman, 2019) and e-learning technologists (Shah, 2018). These are Coursera, Udemy, edX Skillshare and FutureLearn. Additionally, YouTube will also be discussed due to its prominence as a catalyst for e-learning videos in the industry. Throughout this exploration, each platform will also aim to identify whether it is aimed towards strengthening one's academic knowledge or personal hobbies and skills. This portion of the literature review will allow the reader to gain an idea into today's most commonly used or recognisable video-focused learning tools.

First of all, how do we distinguish between videos that are geared towards 'higher education' and those targeting individual hobbies? For the purpose of this research, higher education driven videos are going to refer to videos which discuss subjects formally taught in university level institutions. These are university level subjects which fall under Humanities, Natural Sciences, Applied Sciences, Social Sciences and Formal Sciences (Deng, 2012). Whereas hobbies throughout this paper will allude to extracurricular activities which fall outside of a person's field of study or work (Oxford Learners Dictionaries, 2021). These hobbies could be activities that work towards increasing skills in a particular area or simply for enjoyment purposes.

The first platform to discuss is YouTube. This video-sharing platform was initially developed purely to allow mass video sharing amongst those who did not hold sophisticated computer engineering skills which was needed in the early 2000s in order to publish video media online (Tufekci, 2018). Additionally, YouTube was also made to cater to those seeking entertainment (Tufekci, 2018). Today, YouTube carries videos

which fall under all categories, both academic and non-academic. From molecular concepts in Chemistry to humorous cat videos, YouTube has it all. However, its array of video categories should not discredit YouTube's power as an online learning hub. According to the Pew Research Center, half of US YouTube visitors use it to learn something new (Smith, et al., 2018). With all that said, it can be assumed that YouTube is indeed an informative source of information. However, due to the nature of the domain as an entertainment source and lack of fact-checking for content, YouTube can be considered a hobby and skills focused platform in the field of learning.

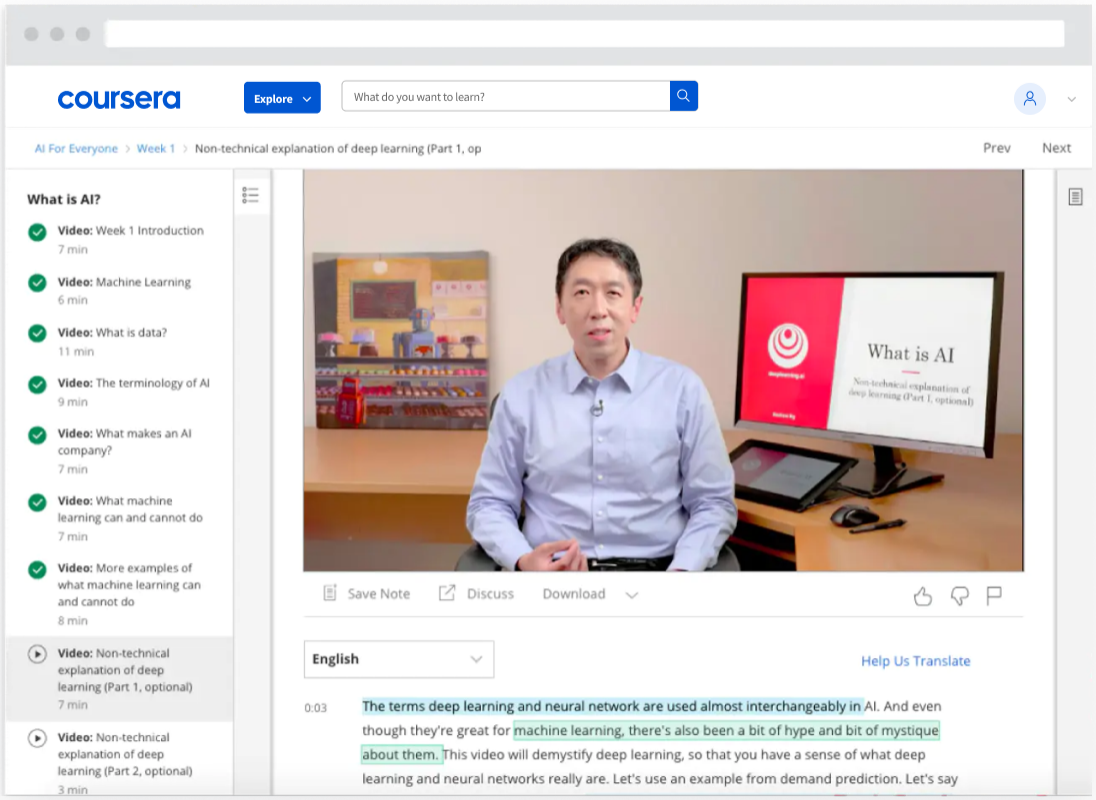


Figure 7: Coursera: Example of video learning (Coursera, 2021).

The next learning platform of discussion is Coursera. This domain was crowned as 'best for academics' by Forbes Education contributors in 2020 (Delfino, 2020). Coursera is an online course provider which was launched in 2012 by Stanford University (Severance, 2012). This platform partners with universities to provide users

with university level course qualifications at far lower costs than full university degrees. For instance, Coursera offers online courses, certificates and university level subject degrees at costs ranging from as low as $29 and as high as $99 (de Leon, 2021). Today, Coursera is partnered with 200 universities, companies and non-profit organisations. These include Princeton University, University of Michigan, University of Pennsylvania, Google, Amazon and more (de Leon, 2021).

Although Coursera provides a blend of learning in the form of texts and quizzes, the primary portion of its course delivery is via video (Figure 7). Coursera users are guided through a chronological section by section approach in which a video is presented for each section along with a full transcription of the spoken script (Coursera, 2021). The videos presented in these learnings are almost always 'talking heads', which indicates an expert speaking directly to the camera (Snelgrove, et al., 2016). Overall, Coursera can certainly be categorised as a 'high ed' video learning platform due to its prestige university collaborations and academic level qualifications.

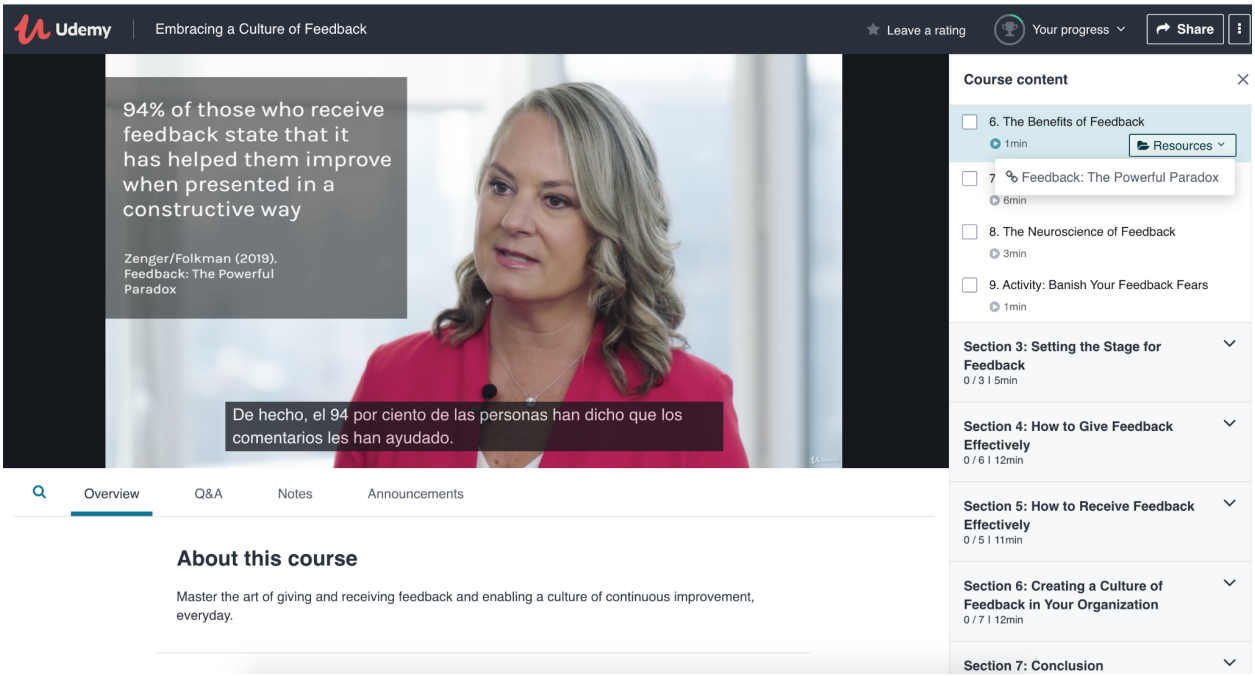


Figure 8: Udemy: Example of video learning within the course (Duffy, 2020).

Next video platform highlighted by Forbes Education is 2010 born company, Udemy. This learning source is yet another open online course provider with payment elements (Cetina, et al., 2018). What sets Udemy apart is that it is far more language

inclusive than its competitors. The domain offers up to 100,000 courses in 50 different languages (Cetina, et al., 2018). Another aspect unique to Udemy is that it allows independent academics to design and create their own courses and publish them to its website (Udemy, 2021). This domain is not connected to university level certifications and degrees like Coursera, however, it is popular for being used in employee training and learning by big corporations such as Mercedes-Benz, Volkswagen, Adidas, Eventbrite and Booking.com (Udemy, 2021). So, where does video play a role in Udemy's services? Similarly to Coursera, the learning style here is video centric with supporting text and quiz elements (Cetina, et al., 2018), (Figure 8). However, unlike Coursera, Udemy's videos consist of far less professionally filmed 'talking heads' and more text and animation style video presentation. Since this platform is more skills and business training focused rather than academic driven, it can be identified as a 'hobby' learning service.

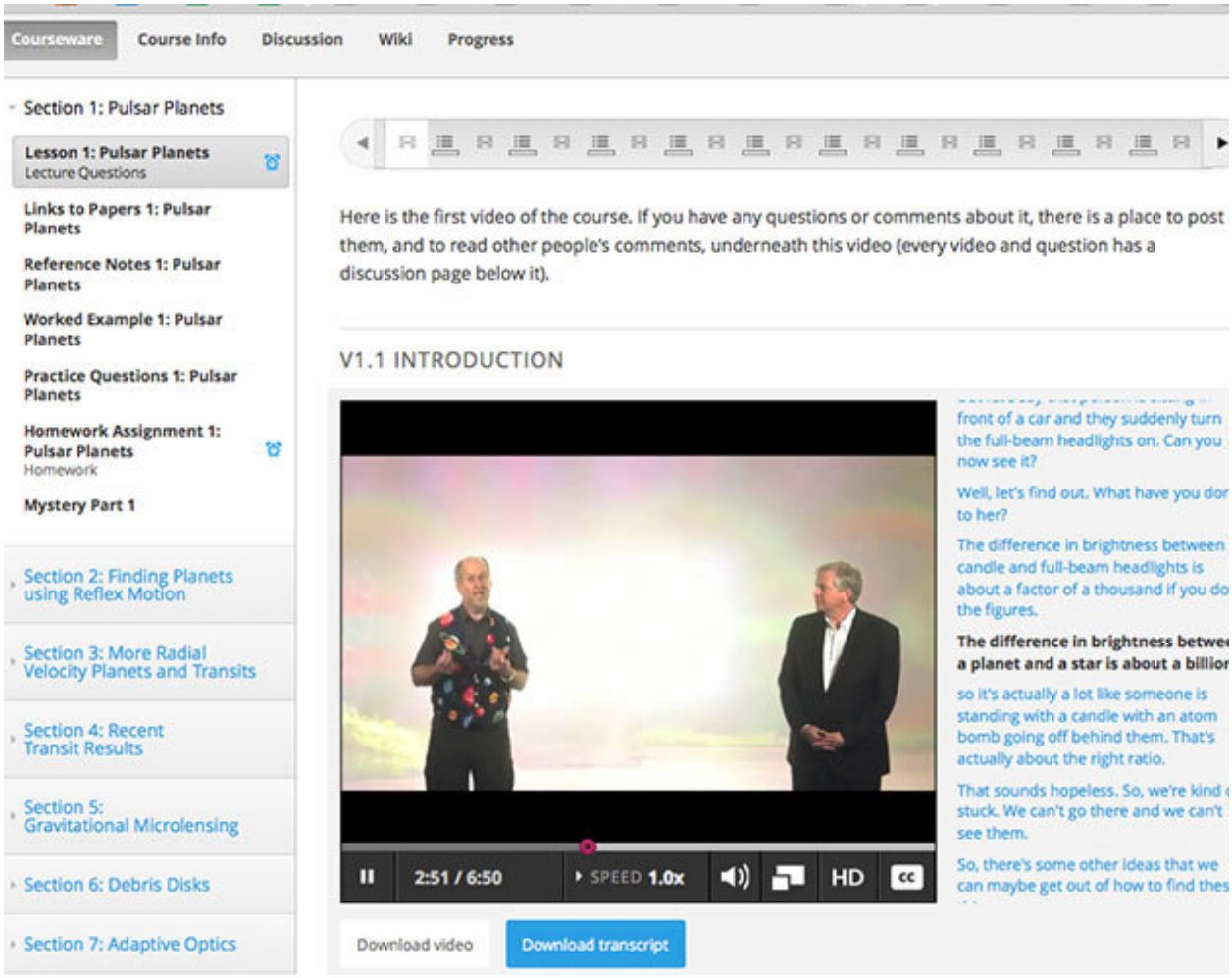


Figure 9: edX: Example of course in progress (edX Course, 2015).

Furthermore, the following online learning provider is edX. It was founded in May 2012 by both Harvard and MIT (Gilbert, 2015). edX is another 'massive open online course' (MOOC), which is a non-profit organisation that provides both paid and free courses from top universities such as MIT, Harvard, Berkeley, Boston University and more (Gilbert, 2015). Despite edX's reputation as a vessel of good due to its Ivy League level free courses, the scientists behind this platform have been vocal about using it as a way to study how users interact with online learning (Parry, 2012). Piotr Mitros, the chief scientist for edX said, "(edX is a) live laboratory for studying how people learn, how the mind works, and how to improve education, both residential and online" (Parry, 2012, p.01). With online video-centric education continuing to rise, it will be intriguing to see what insights edX uncover by studying upwards of their 33 million registered learners (edX, 2021). In terms of video usage, very similarly to the previous two examples, edX employs a video focused learning style, with each section presenting a video in the middle of the page along with an accompanying transcript (Figure 9). When it comes to identifying this platform, its focus on prestigious university level courses along with optional formal certificates of completion render edX a 'high ed' video learning service.

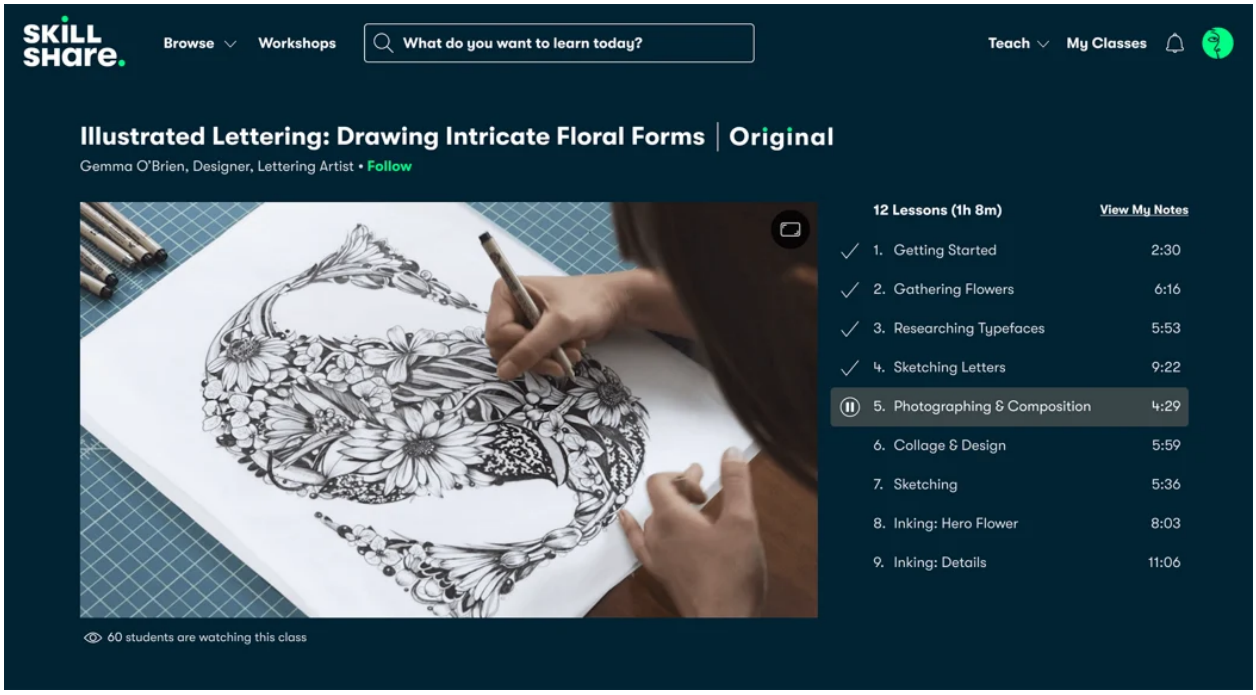


Figure 10: Skillshare: Screenshot of video course (Skillshare Course Example, 2021).

The next e-learning platform to be addressed is Skillshare. This platform is a US based online learning community which launched in 2011 (Carfagna, 2018). Similarly to Udemy, Skillshare allows any creators to execute and publish their own course or instruction video and monetise it on the platform (Skillshare Help Center, 2021). When it began, the aim of this community was to bridge the gap between professional skills and everyday people who aspire to learn new things (Skillshare Help Center, 2021). While Skillshare offers online classes on business subjects such as management and branding, its capacity extends far beyond academic learning. On this website, one can find classes such as cocktail making, cooking, productivity tips and more. According to a Forbes Enterprise Tech expert, "Skillshare is mostly for creatives such as giving courses on animation, photography, lifestyle, Coursera is mostly academic with giving access to university courses" (Koksal, 2020, p.01). With such a focus on activity and personal development skill sharing from anyone around the world, Skillshare can be deemed as a hobby-forward platform rather than an 'high-ed' one. Consequently, in terms of content creation, Skillshare is unique in its sole focus on videos. Courses and short training sessions delivered by this service are completely video centric, offering the full learning experience through this singular medium (Figure 10). This makes

Skillshare the most video-focused online platform of all platforms mentioned in this section (apart from YouTube). With video styles and presentation, it is difficult to predict what approaches each lesson might take. This is because content creators (in this case, independent freelancers, entrepreneurs, teachers, etc), are given full responsibility to story-board and film their own content with no external aid (such as edX which utilise university level filming services to film the material). Therefore, the videos' production value and visual approach differs from course to course. It is up to the users to identify what works best for them.

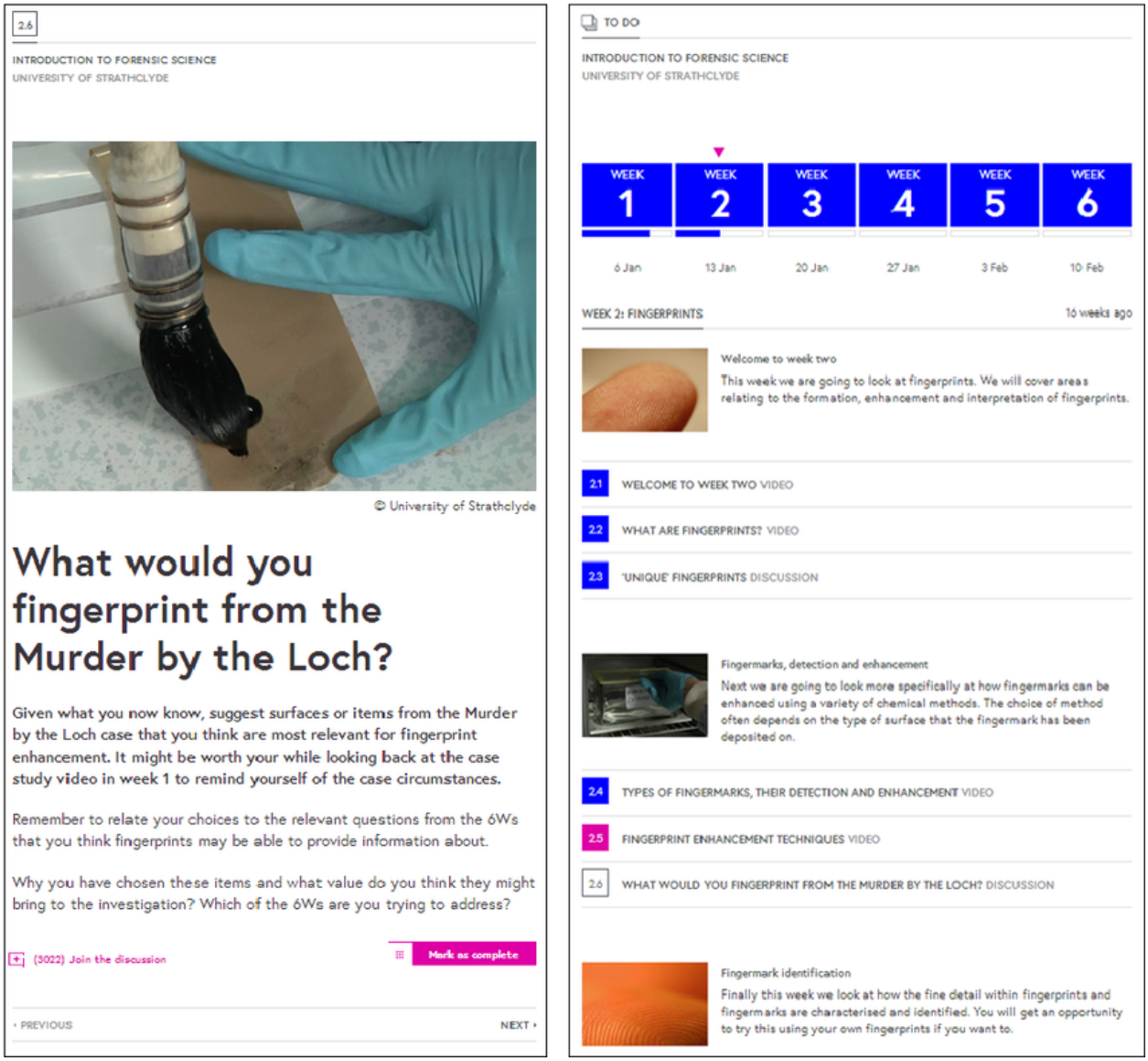


Figure 11: Screens from FutureLearn course on "Introduction to Forensic Science": reflective discussion (right); To Do page (left), (Sharples, et al., 2015).

One e-learning platform which was not identified in Forbes' publications is FutureLearn. However, Shah (2019) lists this provider as one of 2018's biggest online learning services, ranking last after Coursera, edX and Udemy (Shah, 2018). FutureLearn is a Britain based platform which launched in 2012 as a way to incorporate UK education into the majority US MOOC industry (Rizvi, et al., 2020). Like most of the above-mentioned platforms, this one also provides either a fee for partaking in the course or a fee only for the completion certificate (FutureLearn, 2021). Today FutureLearn is partnered with over 175 higher education institutions including University of Birmingham, University of Bristol, Cardiff University, University of East Anglia, University of Exeter, King's College London, Lancaster University, University of Leeds (FutureLearn, 2021). A unique factor which sets FutureLearn apart from the rest, is that it was the first e-learning platform to offer official university credit for some of its courses which could be accessed from all portable smart devices such as phones and tablets (FutureLearn, 2021). Moving on to learning delivery, unlike previous platforms, FutureLearn does not apply a major emphasis on video delivery, but on text and assessment approaches instead (with video as a supporting element), (Figure 11). In terms of platform categorisation, FutureLearn is best placed as a 'high ed' platform due to its university credit bearing programmes and academic focused study areas.

To conclude, e-learning platforms are certainly garnering global interest from university students and everyday learners. These spaces provide accessible learning support and independent skill training. However, no pedagogy has been proven to be completely effective in gaining a majority number of undergraduates using an e-learning platform. As reported by a 2019 MIT study, online MOOCs have a 96% dropout rate (Reich, et al., 2019). This struggling completion rate for video-centric learning platforms is one of the main reasons why studying student engagement in videos is imperative.

iii. Privacy and Risk

With so many open source learning platforms available to use with zero to little costs, millions of university students have flocked to these services to help support their learning or personal hobbies. According to a recent study, more than 100 million learners were registered to video-based online learning platforms in 2018 (Fianu, et al., 2020). Additionally, during the 2020 COVID-19 pandemic and near global lockdown, online learning platforms received exponential growth (Impey, 2021). Coursera received a surplus in sign up which pushed its user base from 1.6 million to 10.3 million by May 2020 (Impey, 2021). Likewise, edX also saw a boost from 5 million new users in 2019 to 8 million new users in 2020, totalling their users to 32 million post-pandemic (Shah, 2020). This was also attributed to millions of learners staying home more frequently due to lockdown COVID-19 lockdown restrictions (Shah, 2020).

The increasing interest in free online learning domains incites the question, how safe are these online spaces for students? While some students may access such communities out of their own personal interest, oftentimes, these domains may be encouraged by teachers, professors, mentors, etc (Zheng, et al., 2015). Therefore, it is important to assess the risks and limitations of these online spaces. In fact, this is not a new topic of concern. In 2014, the White House (particularly John Podesta, Counselor to the President), announced concerns regarding policies relating to privacy in education and the big data associated with it (Podesta, 2014). The US Obama administration found that online learning platforms which provide students with real time feedback with the promise of personalised education, may be collecting student data without complete transparency of data destination (Podesta, 2014). Thus, the government hopes to solidify policies which ensure that such data collection by these domains is used for educational purposes only (Podesta, 2014). This data may include (and is not limited to), user performance, student progress, educational records and even what each user clicks on each time they are logged into the platform in question (Young, 2014).

Consequently, in the *Journal of Entertainment and Technology Law* Polonetsky, et al discuss the downsides of data storing. They describe how some critics refer to for-

profit learning platforms as, “the work of ‘corporate education reformers’ who seek profits at the expense of public education” (Polonetsky and Tene, 2014, p.931). These critics worry that education technologies (edtech) may become a vehicle for ‘data worshipping’ rather than using resources to assist teachers and students (Polonetsky and Tene, 2014). The perplexity here is that private and/or independent MOOC corporations do not follow the same laws as registered universities (Khalil, et al., 2018). With reference to a 2015 study on *Privacy in University MOOCs*, it is said that the open nature and accessible nature of these online platforms, create tension for privacy laws which were originally intended for higher education institutions (Jones and Regner, 2016). This means that privacy laws are strict when it comes to universities, especially in regard to student personal information, however, MOOCs are not required by law to be vigilant as higher education institutions. Another factor commonly raised by MOOC critics is that these courses are taken by students with minimal to no involvement with the online course instructor (Jones and Regner, 2016). In fact, if the course instructor were to actually be more involved, it would be incredibly difficult due to the fact that oftentimes, there is no maximum capacity on the number of students who can enrol in a module or programme on these platforms (Jones and Regner, 2016).

Figure 12: edX’s University Collaborations (edX Homepage, 2021).

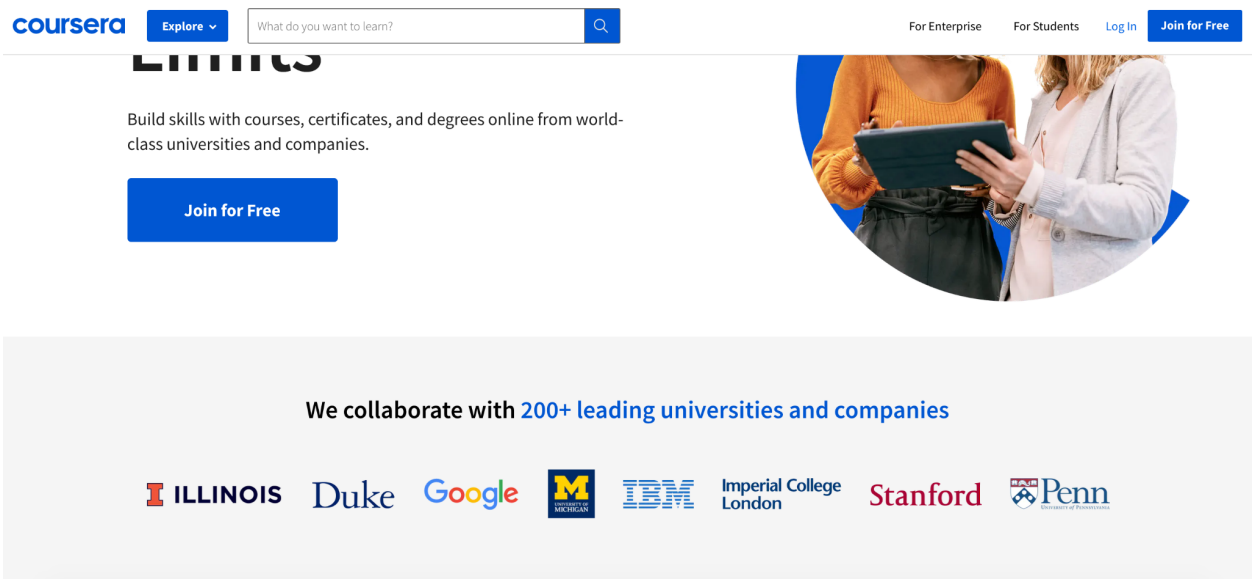


Figure 13: Coursera: University Collaborations (Coursera Homepage, 2021).

Furthermore, these online learning communities are very often roped with formal universities in their website branding. For instance, both Coursera and edX, which are among the most successful e-learning platforms today (Delfino, 2020), utilise brand association with world class university logos right on the first section of their website landing pages (Figure 12 and Figure 13). While MOOCs do offer thousands of university produced content, it is the case that formal instruction at universities do not commonly associate with these platforms (OLC, 2012). In 2012, a US survey found that only 2.6% of US universities are associated with MOOCs and 33% of universities explicitly said they will not be collaborating with MOOCs (OLC, 2012). A 2013 study tracked opinions of Chief Academic Officers at higher education institutions for nine years surrounding online education and MOOCs (Allen and Seaman, 2013).

One of the primary reasons identified for the uncertainty for universities to fully integrate MOOCs into their own classrooms was due to “concerns that credentials for MOOC completion will cause confusion about higher education degrees” (Allen and Seaman, 2012, p.3). In other words, academic decision makers did not want to blur the line between credible university approved educational material with online material that is often approved but not produced by said university or affiliates (Allen and Seaman, 2013). Today, it is unclear how many universities employ MOOCs within their classroom or online tertiary teaching. However, student testimonies on online question forums

attest to the fact that instructors do combine MOOC content into classroom teaching (Zhou, 2018).

Touching back on the 2016 study into Privacy surrounding University MOOCs, Jones and Regner compare Coursera, edX and Blackboard (Jones and Regner, 2016). Most users don't bother to read the Terms and Conditions or the fine print. According to a 2018 survey conducted by Deloitte, *90% of consumers accept legal terms and conditions without reading them* (Harrar, 2018). Jones and Regner, experts in Engineering Ethics, made sure to read the terms. Looking at their data sharing practices, Coursera shares users' personally identifiable data with its 'business partners' in order for certain functions to perform (Jones and Regner, 2016). Added to that, Coursera can transfer this user data if it is sold, merged or goes through an organisational change (Jones and Regner, 2016). A 2019 sentiment analysis, assessed every word used in the Terms of Agreements published by three MOOC giants, edX and FutureLearn. (Prinsloo, et al., 2019). This took place because research found that the use of positive and/or emotive language can help persuade users to agree to the terms or even soften the magnitude of data sharing text (Prinsloo, et al., 2019).

Ultimately, the sentiment analysis revealed a higher use of positive emotive language in the terms of use of all three MOOC providers (Prinsloo, et al., 2019). However, among all three platforms' use of language in the terms of agreements, researchers identified that FutureLearn's policy documents were the most specific and less complex or ambiguous (Prinsloo, et al., 2019). Researchers also noted instances of sympathy and transparency, stating, "FutureLearn policies appeared more sympathetic and more readily addressed the rights of the individual" (Prinsloo, et al., 2019). Overall, while it is uncommon for users to read through terms of use and policy agreements prior to signing up to websites, e-learning providers, particularly those serving students, should make an effort towards transparency and clarity within these texts. This should take place because not only would it show good practice in pedagogy and ethical compliance, but also could aid in adoption by universities.

When it comes to YouTube, concerns regarding privacy and data protection have been far less discussed in literature. One reason for this is because all internet users

have access to watch YouTube videos regardless of whether they are registered users or not. Anyone with internet access can watch full length YouTube clips without even a username attached to their IP address. Nevertheless, YouTube is no stranger to data protection criticism and privacy violations. In 2020, YouTube faced a £3.2 Billion UK Lawsuit due to Children's Privacy Violations that affected five million children (Ikeda, 2020). Despite the UK placing high restrictions for privacy protection surrounding minors, it was found that YouTube did not put the effort to screen out minors from its targeted advertising campaigns (Ikeda, 2020). Today, YouTube has claimed to have amended its platform to remove any targeted advertising on videos flagged as 'intended for children', regardless of age (Ikeda, 2020). However, various consumers have stated otherwise (*Feller and Burroughs, 2021).* It could be seen that YouTube reacted swiftly to this scandal and received far less privacy concerns than MOOCs which are closely associated with reputable universities around the world. However, it is important to note that less privacy concerns does not equate to no privacy concerns at all. Additionally, it could be the case that MOOCs receive more privacy complaints due to their ties to formal and higher education, which is more associated with students than YouTube.

iv. Commercial interference

While many of the video learning platforms above provide beneficial learning materials for students, teachers, and independent learners alike, one must be aware of the potential interference or distractions that could be present on such online communities. Online educational videos are almost always aimed towards helping to educate people, an honourable (and optimistic) vision. However, where this mission lies is also at a conflict with the platforms' monetisation schemes (such as programme fees, certificate fees, annual subscriptions, etc).

Simon Marginson, a professor of Higher Education from the University of Melbourne, argues that it sounds good to provide a service that is deemed as being for the 'public good', however, behind that is a rivalry for domination of the online higher education industry (Marginson, 2012). Marginson asserts that brand prestige plays a big role in a service's commercialisation. To exemplify Marginson's outlook, for an online service like Coursera, edX or Futurelearn to gain collaboration with top universities such

as Harvard, Boston, MIT, etc, they are not only elevating their brand image and dominance in the e-learning sector, but also able to justify higher fees and higher subscription fees and certificate costs for users. So, why is this a bad thing? This is because learning platforms may continue to compete for university logos on their homepage and as a result, begin marginalising less prominent universities which also bring forth educational content to the platform. For instance, Marginson describes this by alluding to the commercialisation of e-learning as being a 'winner takes all' rivalry between the platforms, he states, "When competing for free hits from the public, MOOCs from household name Ivy League universities have a decided edge over Snake Gully College. It's not just an advantage, it's complete domination." (Marginson, 2012, p.2).

In an effort to unite learners and to provide mass sharing and accessibility of knowledge, high ed earning communities like Coursera, edX and FutureLearn should help play a role in diminishing elitism in education and promote knowledge sharing among academics instead. Accordingly, Thomas Clarke, professor of Corporate Governance at the University of Technology Sydney, agrees with Marginson (Clarke, 2013). However, he suggests that the problem does not lie within the core of the e-learning companies, but stems from those investing in it. Clarke (2013) argues that while initial founders and university partners who are behind the platforms might have good intentions, it is the venture capitalists that have invested and continue to invest in MOOCs which have the commercialisation tendencies that are evident across these domains (Clarke, 2013).

Clarke predicts that all online learning platforms will continue to require venture capitalist funding as they continue to seek further resources and expansion (Clarke, 2013). Additionally, it is predicted that by 2030, this online learning realm will be flooded with further monetised services and even advertisements to help sustain the business (Clarke, 2013). Currently, the above-mentioned websites do not contain advertisements, however, a growth in additional services can be observed due to elements such as certificates, diplomas, bonus lessons, extra resources and more - all of which are monetised. Nevertheless, despite it not being the ethical and 'public good' pedestal which some of these online services may stand on, it can be argued that the competitive

element of MOOCs ultimately benefits users. At the end of the day, users gain access to courses from prestigious universities across various platforms and at varying price ranges. However, the issue of dropout remains.

Richard Terry, a PhD researcher at the University of Warwick, argues that whether these platforms explicitly monetise their services or not, they are already tapping into a much bigger arena of commercialisation with their storage of user data (Terry, 2019). He states, “The value of the data that we produce as platform users is central to this platform mode of commercialisation, and the concerns and controversies that this engenders have followed in its wake” (Terry, 2019). This statement alludes to both the hefty monetary value of data but also the consequences of such material as well.

Moving on, one video-centred platform with a large reputation for commercialisation is YouTube. Unlike MOOC platforms, YouTube’s version of commercialisation does not centre around additional website services or tangible elements like shipped diplomas and certificates. As of May 2021, YouTube is the second most visited website in the world, with 300 hours of video uploaded per minute and almost 5 billion videos watched every single day (Donchev, 2021). With such a massive user base and no fees for creators, YouTube relies on advertisements for its profits (Jarrett, 2008). What is unique about YouTube is that how the company as well as the video creators make money is purely connected to the number of viewers playing a video (Jarrett, 2008). Video media researcher, Kylie Jarrett, describes this with wonder, she states, “The high monetary value of YouTube is thus based not on the quality of the content available on the site, nor the advances of its particular technological system, but on the economic potential of the eyeballs it has attracted” (Jarrett, 2008, p.133).

Moreover, in order to earn even more profit, YouTube would need to retain the viewer’s ‘eyes’ as long as possible when an advertisement is being played. The answer is simple yet complicated. YouTube is owned by Google and Google tracks the words used in each person’s daily searches to customise advertisements which appear on all your Google owned platforms including YouTube (Beattie, 2020). The individual data which Google collects belongs to its advertising counterpart called Google AdWords

(Miller, 2010). Therefore, whether you're using the regular Google search engine, Google Maps, Google Play, etc (using your Gmail email address or the same device), you are adding to your pool of user data which helps customise the video advertisements which appear to you on YouTube (Beattie, 2020).

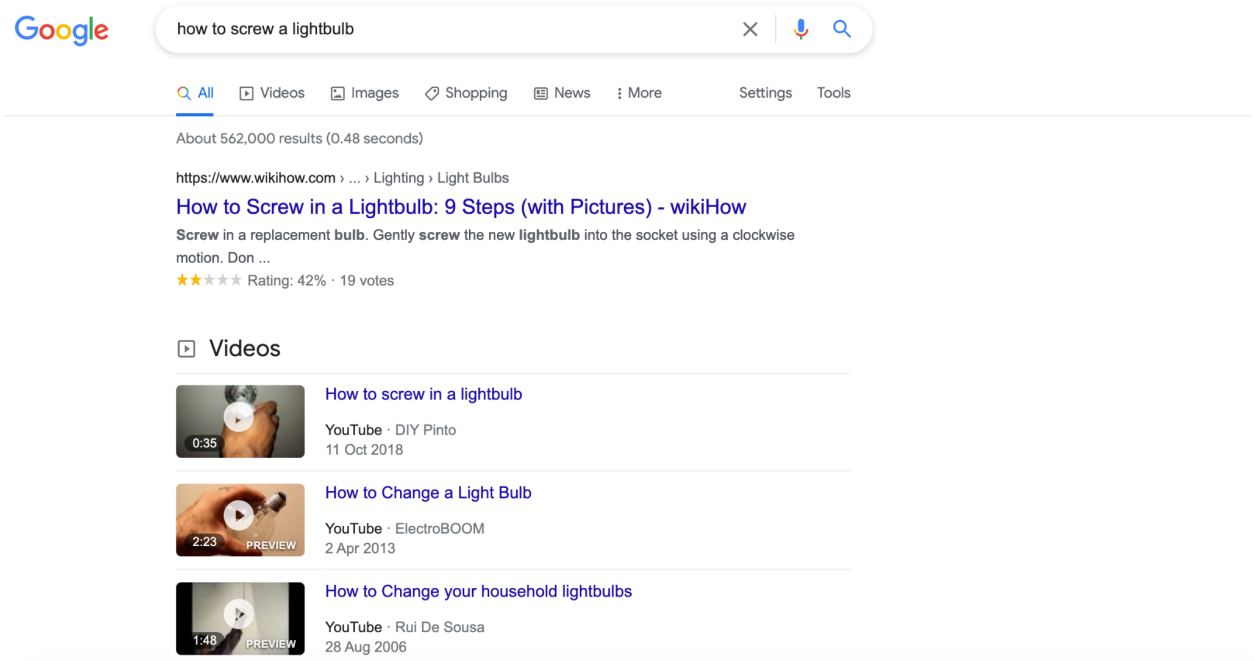


Figure 14: Screenshot of Google web search to demonstrate YouTube suggestions (Elkadi, 2021).

So, how effective are these methods? In 2017, YouTube received $9 billion in profit from advertising and the numbers have only continued to increase since then (Beattie, 2020). Dave Marsey, senior vice president of media at Digitas, an online advertising agency, discussed Google's business model in 2010, praising its effectiveness. He said, "Search is a huge component of that, but there are times when you want some entertainment or you want to solve a problem and going to YouTube makes sense" (Miller, 2010, p.3). Interestingly enough, when one searches anything on the regular Google search engine, the second row almost always contains YouTube video suggestions (Figure 14).

In terms of how advertisements can interfere with the learning process in YouTube videos, there seems to be a deficiency in literature surrounding this issue. However, a 2015 research into intrusive video advertisements during online video

content invokes negative attitudes from viewers towards the company or advert brand in question as well as the hosting platform, such as YouTube (Goldrich, et al., 2015). However, participants shared that humorous or informative adverts were deemed as less intrusive (Goldrich, et al., 2015). These results suggest that while the majority of intrusive ads are generally unwelcomed, some adverts, if catered correctly to the individual, may actually be positively accepted. However, the questions remain: how do intrusive advertisements on YouTube affect viewer learning in educational videos? What are the ethical implications of using educational spaces for advertising? This would be a useful area for future research.

e. Student Engagement Theories

The phrase, 'student engagement' has been floating around the higher education sector for years. HE officials and app developers alike aim to increase this element in their business, classrooms and online platforms. However, this intangible concept continues to have various meanings. One 2013 study describes student engagement as complex and multifaceted (Kuh, 2013. So how is it defined? To try to define this concept, some researchers tried to flip it around, what is a non-engaged student? Mann (2001), characterises the contraposition of engagement as 'alienation' (Mann, 2001). This suggests that engagement has a lot to do with involvement and presence. However, Quaye, et al., (2019), editors of *Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations* argue that this concept is not just involvement and active participation, but is also concerned with sensations and feelings (Quaye and Harper, 2019).

Despite various back and forth surrounding this area, some studies do indeed define this conceptualisation. Kuh (2007), details student engagement as "participation in educationally effective practices, both inside and outside the classroom, which leads to a range of measurable outcomes" (Kuh, 2007). However, an opposing definition focuses more on the institutions which perform the engaging activities. This definition interprets student engagement as, "the process whereby institutions and sector bodies make deliberate attempts to involve and empower students in the process of shaping the learning experience" (HEFCE, 2009, p.10), recognised the distinctions of thoughts

among academics and combined the various viewpoints a few years later, identifying student engagement as, “the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to induce students to participate in these activities” (Trowler, 2010, p.7). This definition combines both what students might gain as a result of their engagement, and the positive outcomes the institution strives for.

Another view asserts that due to the multiplicity of contradicting definitions in academia, student engagement should simply be defined by the way in which it is measured (Parsons and Taylor, 2011). However, this was a controversial assertion in 2011, due to a lack of common ground regarding the best approach to measuring student engagement. While some academics tracked student engagement purely through quantitative data (achievement data) such as grade results, degree completion rates and attendance, others looked at student interest, assignment speed and enthusiasm or enjoyment towards the learnings (Parsons and Taylor, 2011). Today, the National Survey of Student Engagement (NSSE), which surveys millions of students in higher education, has introduced a new method of assessing classroom engagement levels (Ewell, 2010). The survey is rolled out to students during their first year and again during their final year, with a focus on five major engagement elements (Ewell, 2010). These early 2000s benchmarked five factors of engagement are; level of academic challenge, enriching educational experiences, student-faculty interaction, active & collaborative learning and supportive campus environment (Kuh, 2003, p. 26), (Figure 16).

This survey-led approach to testing student engagement quickly gained notoriety due to its ability to achieve specific individualised data. In agreement with this, one 2006 study praises this method’s capacity to track individual progress of engagement over time as well, stating “When well-crafted, student surveys can provide insights into the student experience that other sources of information cannot, such as estimates of one’s ability to interact effectively with others on an individual basis or in small groups, and the degree to which one’s values and ethics have developed since starting college” (Carini, et al., 2006, p.2). In fact, evidence dating back to 1976 suggests that self-reporting

under well thought out conditions is one of the most reliable methods of participant measurement in humanities and social sciences (Tuan, et al., 2004; Anaya 1999).

Moving on, how beneficial is this growing concept? Student engagement has been found to link to positive learning results in student environments. This was proven by research published in *Research in Higher Education* which studied more than 1,000 students across 14 colleges (Carini et al, 2006). The study found that, "student engagement is linked positively to desirable learning outcomes such as critical thinking and grades" (Carini et al, 2006, p19). By taking that into consideration, one can determine the value of capturing student engagement to enhance learning. Similarly, the Australasian Survey of Student Engagement (AUSSE), suggests that student engagement is characterised as "students' involvement with activities and conditions which ultimately accounts for high-quality learning" (Coates, 2010).

Correspondingly, a study on student engagement linked to student outcomes detected high positive outcomes from final year students who have been identified as 'more engaged' than their peers. The study highlights an increase in likeliness to learn, dedication to studies and a higher likelihood of achieving their academic goals (McClenney, et al., 2012). Nevertheless, while most literature on student engagement focuses on an increase in high scores and an elevated interest in the course, little research has gone into student engagement as a mechanism of improving student wellbeing. This is likely because most research into student engagement stems from Education and Learning Enhancement sectors rather than biological or cognitive sciences. However, a 2010 study from the *Journal of Psychology*, takes on this endeavour. This research identified that providing 'clear and autonomous' academic tasks as well as providing an abundance of feedback opportunities are two ways of gaining high levels of "intense student engagement" (Steele, et al., 2009, p.5). As a result, students on the other end of these teaching style demonstrated improved mental and physical wellness (Steele, et al., 2009). This research is incredibly valuable to the education sector because it not only introduces two new methods of engagement, but also touches on the subject of wellbeing which is lacking in research within the area of student engagement. This research also could mean that there is plenty of scope to

utilise effective student engagement to improve physical and mental health of university students today.

Table 2

Item Distribution Across Factors

Skills	Emotion	Participation	Performance
Study regularly	Put forth effort	Have fun in online chats	Do well on tests
Stay up on reading	Find ways to make materials relevant	Participate actively in forums	Get good grades
Look over class notes	Apply to my life	Help fellow students	
Be organized	Find ways to make material interesting	Engage in online conversations	
Listen/read carefully	Really desire to learn	Post regularly in forum	
Take good notes over readings, PPT, video lectures		Get to know other students	

Figure 15: OSE Revised Model (Dixson, 2015).

Online student engagement

Now that student engagement as a concept has been discussed, it is vital to explore student engagement in the online learning context. In 2005, a study from the *Journal of Education Research* aimed to identify a reliable measure of student engagement in higher education courses (Handelsman, et al., 2005). To do so, researchers conducted an exploratory factor analysis using a 'student course engagement questionnaire (SCEQ)' to come up with 4 factors of college student engagement that are, "distinct and reliable" (Handelsman, et al., 2005, p.184). These founding factors were skills, participation, emotion and performance (Handelsman, et al., 2005), (Figure 15). The four factors were derived from the National Survey of Student Engagement (NSSE), which benchmarks the best practices for this area (Kuh, 2003), (Figure 16).

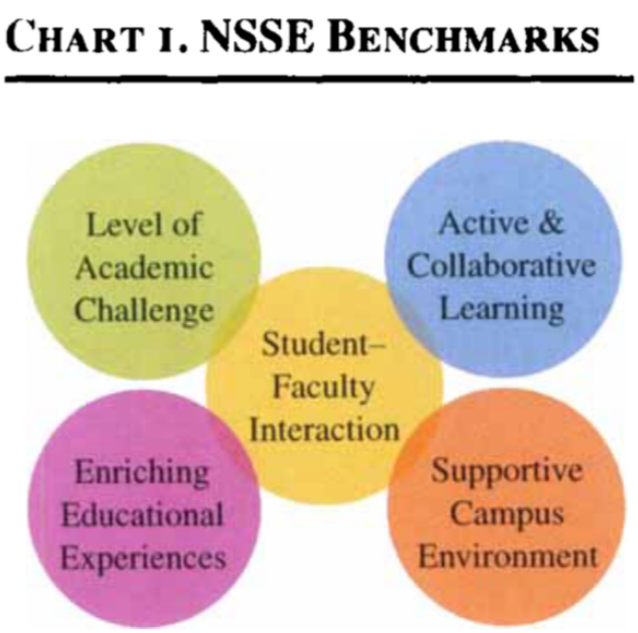
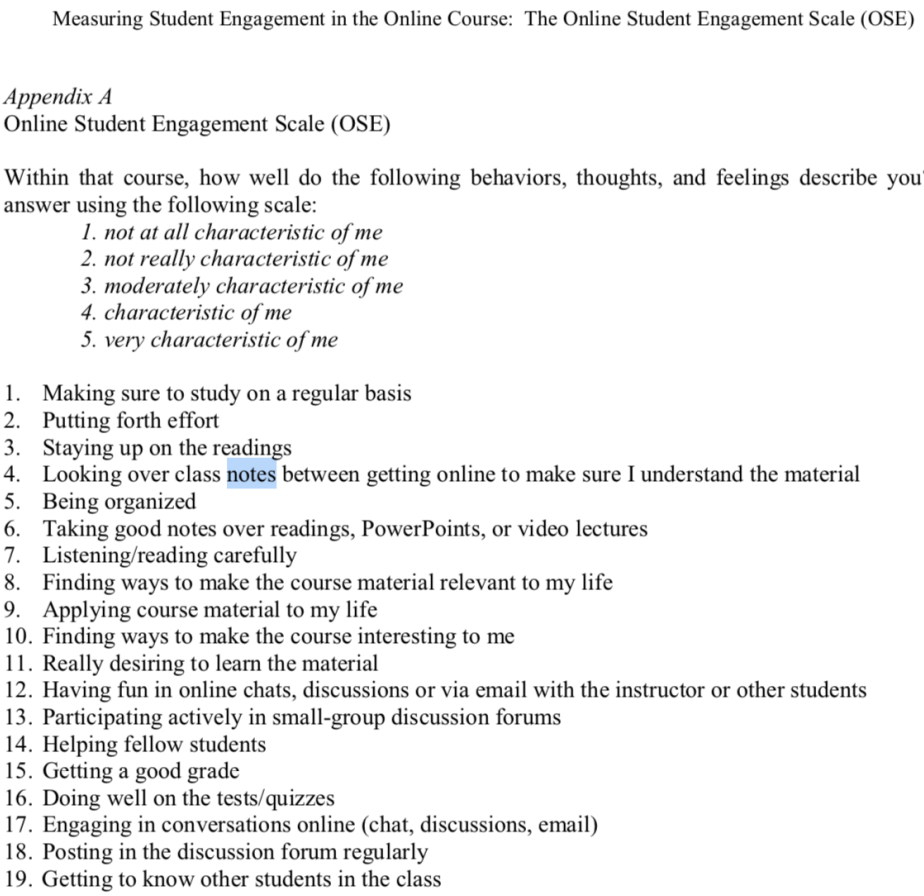


Figure 16: *NSSE benchmarks of student engagement* (Kuh, 2003, p. 26).

With the rise of e-learning, questions in the Education sector began to be raised regarding student engagement within the online realm. 10 years later, this study was re-visited by a professor from Indiana University in the US. Marcia Dixson (2015), recognised the value of online learning and utilised Handelsman's (2005) factors to apply that to online learning engagement.

Dixson (2015) made use of the same factors along with their relevant engagement questions to translate those to the online environment. For instance, While the classroom engagement model for Skills describes, "taking good notes in class", Dixson re-adjusted that to "taking good notes over PowerPoints or video lectures" (Dixson, 2015, p.5), (Figure 15). As a result, face to face engagement factors were all translated to online factors and a 19-item questionnaire was produced to allow teachers to measure online student engagement. This questionnaire consists of 19 behaviours, thoughts and feelings that relate back to each of the four engagement factors; skills, participation, emotion and performance (Dixson, 2015, p.15). In order to utilise this approach, students are presented with a questionnaire document and asked to rate each characteristic on a scale of 1-5 (Figure 17). This model as well as questionnaire

will be utilised throughout this research in order to assess student engagement with specialised video. In order to achieve this, the questionnaire elements will be revised to fit the characteristics of online video rather than online lectures and MOOCs.



Measuring Student Engagement in the Online Course: The Online Student Engagement Scale (OSE)

Appendix A
Online Student Engagement Scale (OSE)

Within that course, how well do the following behaviors, thoughts, and feelings describe you? Please answer using the following scale:

1. not at all characteristic of me
2. not really characteristic of me
3. moderately characteristic of me
4. characteristic of me
5. very characteristic of me

1. Making sure to study on a regular basis
2. Putting forth effort
3. Staying up on the readings
4. Looking over class notes between getting online to make sure I understand the material
5. Being organized
6. Taking good notes over readings, PowerPoints, or video lectures
7. Listening/reading carefully
8. Finding ways to make the course material relevant to my life
9. Applying course material to my life
10. Finding ways to make the course interesting to me
11. Really desiring to learn the material
12. Having fun in online chats, discussions or via email with the instructor or other students
13. Participating actively in small-group discussion forums
14. Helping fellow students
15. Getting a good grade
16. Doing well on the tests/quizzes
17. Engaging in conversations online (chat, discussions, email)
18. Posting in the discussion forum regularly
19. Getting to know other students in the class

Figure 17: OSE Questionnaire sheet (Dixson, 2015).

i. Videos and Student Engagement

Once both student engagement and online student engagement in Higher Education have been explored, it is helpful to have a look at what is known regarding video media in this area. Has video media been linked to student engagement in academia? A 2014 research used data from 6.9 million video watching sessions from edX to measure video engagement in terms of style of production (Guo, et al., 2014). The researchers utilised two factors to measure student engagement with the educational videos; watch time and attempt to answer post-video related questions and/or tasks (Guo, et al., 2014). The results were not only incredibly interesting but also extensive. The findings include the following:

- Shortest videos of 0-3 minutes had the highest levels of engagement
- Video length was the most prominent deciding factor for engagement
- 'Talking head' videos are more engaging than PowerPoint slide driven videos
- High production value does not greatly affect student engagement
- 'Talking head' videos are more engaging than live recordings of lectures, in which a professor is standing at a distance (podium, whiteboard, etc).
- Pre-production planning (such as storyboarding the video, preparing activities, scripts, activities, etc) increases engagement
- Speaking faster increases video engagement
- Students re-watch tutorial videos more frequently than lecture videos
- Digital 'Khan-style' tablet drawing instructional videos are more engaging than PowerPoint slide videos

  (Guo, et al., 2014, p. 44-48).

These findings indicate a pattern of positive affinity towards short, direct to camera and carefully planned out learning videos. Moreover, a 2017 analysis from Pennsylvania State University takes a different approach with student engagement research by using it as a tool rather than an outcome of study. This research looked into how student engagement with both videos and forums affect achievement levels in MOOCs (Bonafini, et al., 2017). The study pinpointed that an increased interaction with

the video as well as corresponding chat forum, increased the probability of higher achievement in the course (Bonafini, et al., 2017). However, it was also identified that the forum features were more commonly used by students for information acquisition rather than for deep meaningful reflection or discussion about the video (Bonafini, et al., 2017). This is a highly powerful insight because it suggests that forum features associated with videos can be beneficial indicators of whether a video was deemed as informative or clear enough. If a student is running to the forum messaging section for further clarification and showcasing signs of confusion then the video might have possibly not succeeded (enough) in delivering the right learnings. However, if the discussion forums are mostly being used to expand on the ideas and topics discussed, then this is a more positive sign of the video's ability to capture engagement rather than incite confusion and gaps in understanding.

While current literature suggests a dearth in video production style research into levels of engagement, two studies do the job of exploring the area of Animation employment in educational videos. However, it is helpful to first define Animation in the context of video media. Liu and Elms (2019) describe animation as a powerful pedagogical tool which connects audio communication, visual cues and motion graphics to explain complex concepts and enhance student interest (Liu and Elms, 2019). In the first article, the researchers survey 254 undergraduate university students to assess any effects of animated instructional videos on their learning experience (Liu and Elms, 2019). Ultimately, the student participants self reported an increase in engagement, interest, understanding and self-directed learning after watching 'cartoon-style' instructional videos (Liu and Elms, 2019, p.23). However, it is important to note that such results cannot be generalised due to animated videos differing very significantly from one producer to another. This is because almost every animated video produced, relied heavily on dialogue, animation/character quality, voice acting and more (Xiao, 2013; Liu and Elms, 2019).

Question	Average rating	Standard deviation
1. I enjoy learning with a whiteboard.	3.8	0.10
2. I do not (do) like receiving instruction through a whiteboard.*	3.5	0.18
3. I will be able to get a good job if I learn how to use technology.	3.5	0.11
4. I concentrate better in class when a whiteboard is used to deliver instruction.	3.4	0.15
5. I would work harder if my teacher used the whiteboard more often.	3.2	0.22
6. I know that using technology gives me opportunities to learn many new things.	3.6	0.12
7. I can learn many things when my teacher uses a whiteboard.	3.5	0.14
8. I enjoy lessons on the whiteboard.	3.7	0.08
9. I believe that the more often teachers use whiteboards, the more I will enjoy school.	3.4	0.18
10. I believe that it is important for me to learn how to use a whiteboard.	3.2	0.11
11. I feel comfortable using a whiteboard.	3.5	0.11
12. I enjoy using the whiteboard.	3.7	0.14
13. I (do not) think that it takes a longer amount of time to learn when my teacher uses a whiteboard.*	3.4	0.14
14. Using a whiteboard does not scare me at all.	3.5	0.22
15. Using a whiteboard (does not make) makes me nervous.*	3.5	0.21
16. Using a whiteboard is (not) very frustrating.*	3.5	0.20
17. I will (not) do as little work with technology as possible.*	3.6	0.14
18. Whiteboards are (not) difficult to use.*	3.5	0.19
19. I can(not) learn more from books that the whiteboard.*	3.3	0.16
20. I (do not) get a sinking feeling when I think of trying to use a whiteboard.*	3.7	0.10
Averages	3.48	0.15

Figure 18: Scoring survey for Interactive Whiteboard research (Dixson, 2015).

The second animation related study revolves around the use of interactive animated whiteboards and whether they can affect student engagement. In this research, Beeland (2002), surveyed both students and teachers to assess the extent of the impact of this technology. The survey questions consisted of 20 questions that used an approach comparable to that of the Online Student Engagement (OSE) model questionnaire (Figure 17). In fact, the questions presented reflected the same four skills of online student engagement put forth by Dixson (2015) along with the rating styles as well (Figure 18; Beeland, 2002). Furthermore, the study found that use of animation driven whiteboards in class did increase student engagement levels due to the appeal of additional visual elements during the learning process (Beeland, 2002). Despite this positive result, a 2018 research into digital storytelling argues that visual elements and shiny new technology is not enough to keep student engagement elevated (Taylor, et al., 2018). This study into student engagement in the digital sphere, highlights that animation (or any other form of digital video design) must be combined with a storytelling approach in order to effectively retain student engagement (Taylor, et al., 2018). Doing this will not only improve student engagement, but also, “(connect)

multiple metaphors into a compelling overarching narrative" (Taylor, et al., 2018, p.2). This assertion coincides with Bonafini's (2017) earlier research outcome which revealed student interest in high quality pre-production planning and narratives. Interestingly enough, a 1994 study into multimedia and comprehension stated that animation induces very little changes in learning outcomes (Beheshti,et al., 1994). The article said, "In some ways animation can provide a very dramatic visual effect, but its impact on learning appears to be much more subtle" (Beheshti,et al., 1994, p.527). However, there was no mention of any impact on student engagement (rather than the actual learning). In addition, it may be considerable to wonder whether this notion has changed since 1994 as the above literature demonstrates.

At a wider look at this area in academia, it can be observed that the majority of the literature surrounding use of animation and motion graphics in learning media suggest its continued utilisation mainly within the field of Natural and Formal Sciences such as Physics, Biology, Chemistry, Computer Science and Mathematics (Rosen, 2019; Jenkinson, 2018; Fisk, 2008; Karlsson, 2010). This is not a critical point, but an indicator of the positive potential of this media style's effectiveness in teaching complex subjects. It can be predicted that animated learning videos may continue to grow amongst all fields of study, beyond just the YouTube platform, but in formal education such as MOOCs as well.

Overall, while it seems to be the case that most studies employ significantly different approaches to measuring student engagement in video media, results and outcomes are surprisingly comparable. A consistent pattern of engagement toward short videos with direct communication to viewers, quick and concise language, good storytelling and/or narrative and absence of text heavy visuals can be identified among the above-mentioned literature. Nevertheless, studies into video engagement for specific video styles still seems to be deficient. This research will attempt to contribute to this area of knowledge relating to engagement amongst different video styles.

f. Video Learning during COVID-19

The 2019 outbreak known as COVID-19 played a role in bringing face-to-face education around the globe to a stand-still. A publication titled, 'The impact of Covid-19 on higher education around the world,' highlights that by April 1st of 2020, 43 percent of the global population was in lockdown, including 80 countries and territories (Marinoni, et al, 2020, p.8). The study continues to cite that by this date, universities were shut down in 185 countries, affecting more than 500 million HE students around the world (Marinoni, et al, 2020, p.8). One study from the *Journal of Advanced Science and Technology* highlights that this mass closure was especially detrimental to higher education because the closure began as a temporary guidance and continued to be a point of contemplation for decision makers for months (and now years) to come, leaving professors and educators scrambling to learn what the best online approaches are (Tarkar, 2020). Schleicher (2020) also cites the unpredictability of government laws and teacher preparedness for the online switch as top stressful factors for higher education throughout the pandemic.

UNICEF reports that as of January 2022, more than 616 million students now are still affected by fluctuating school closures (UNICEF.org, 2022). In fact, this March will mark two years of ongoing uncertainty for both learners and educators. In his statement, UNICEF Chief of Education, Robert Jenkins, stated that "Students need intensive support to recover lost education," (UNICEF.org, 2022). It is interesting to observe that key figures in Education, such as UNICEF's Chief, view the past two years of intermittent digital education as 'lost education'.

However, whether negative or positive, the World Bank considers that the short, medium and long-term impacts of remote learning are still under investigation, it is too early to provide a bird's eye stance on how remote learning is impacting the average student (WorldBank, 2021). With that said, the World Bank released two reports throughout 2021 which discuss key findings surrounding the effects of remote learning and how various countries implemented remote learning, respectively. The first learning outcome mentioned is that remote learning is heavily dependent on sufficient

technology and therefore, inequalities among resource access by students is a weighted issue (WorldBank, 2021).

With millions of students studying from home, how did video learning play a role, if at all? While there is an extreme scarcity surrounding studies looking at video in particular, some papers tackling wider issues often touch on the subject. Aristovnik, et al (2020) looks at the impacts of the pandemic on higher education students from a global perspective. According to this study, the most common form of online education adopted after the emergence of university closures was real-time video conferences at a rate of 59.4% globally (Aristovnik et al, 2020, p.8). This refers to live lectures or seminars conducted via school portals during specified class time. Consequently, the study goes on to list asynchronous sharing of slides/presentations to students as the second most dominant form at 15.2% (Aristovnik et al, 2020, p.8). This is then followed by pre-recorded video (11.6%) and finally, written learning (9.1%) (Aristovnik et al, 2020, p.8). This is a vital indication that pre-recorded or edited videos were not a priority resource for higher education institutions following the sudden digital learning transition.

Viewing this matter from a different angle, students around the world were surveyed to track satisfaction measures on the new styles of learning. The highest preferred learning tool was real-time video conferences, followed by pre-recorded videos then presentations and written communication (Aristovnik et al, 2020, p.8). This presents a case that students may prefer asynchronous videos rather than presentation decks. Nevertheless, nuances were clear among different regions and cultures. For instance, North America, Europe and Asia were among the geographical locations with students most satisfied with the delivery methods above, whereas Africa (Egypt and South Africa in particular), preferred written learning material instead. This insight brings us back to the discussion of sufficient technology in student homes as a requirement for smooth video learning experiences and remote learning more widely (WorldBank, 2021).

Additionally, despite Asia being flagged among the most agreeable to recorded and live lectures, Philippines was one country in which the online shift was completely rejected (Toquero, 2020). Three days after the Philippine government issued a study from home order, both students and teachers revolted due to under-preparation and

planning and so the Commission on Higher Education redacted their order (Toquero, 2020). Toquero's report suggests that countries with high push back, such as the Philippines, should scale up teacher training for online video teaching. This means that student acceptance or comfort with new styles of teaching begins with the expertise and comfort of the instructors (Toquero, 2020).

Moreover, a study derived from the US National Library of Medicine flags that following the outbreak, the jump from traditional learning to online left the majority of HE providers with no choice but to switch to video instruction for practical studies such as lab work (Burki, 2020). This paper detailed that while students in the Sciences had no choice but to adhere to the video formats of teaching, employers were not wowed by the substitute to hands-on learning, which played a role in increasing unemployment for US students (Burki, 2020). This also raised questions of value for money in terms of their university study, when their graduation certificates no longer held the same power as their previous cohorts (Burki, 2020). This is interesting because it provokes the question; can such outcomes of asynchronous video instruction lead to the undermining of video media as a form of learning in higher education? Further, can this downward spiral also play a part in the eventual decrease of engagement from students, if they begin to consider themselves less employable when learning takes place remotely, through digital media? While there is no research on the effects of COVID-19 on the perception of video instruction, this will be a consideration to assess in the Discussion chapter.

In a 2021 publication from the *Journal of Continuing Education*, researchers identify issues faced by students due to synchronous live video sessions. These issues included privacy concerns regarding opening their cameras within their personal homes, inequalities in learning experiences due to poor internet connections or faulty devices and distractions at home to name a few (Neuwirth et al, 2021). Suggested strategies proposed in this study offer that instructors increase ability to provide pre-recorded asynchronous videos and to pair this with prompt discussions and written responses to student questions. The study also suggests that synchronous lectures should have a 'replay' option for those unable to join the live versions due to factors mentioned above (Neuwirth et al, 2021, p.152). What is worth noting here is that nowhere in this paper is

there any discussion of supporting video material as a form of learning support for remote learning or any non-university published material as a useful resource for post-pandemic teaching response. This intriguing because it reveals that often, even when a university is cornered or under-resourced (in this case, for video digital learning material), they still do not turn to external videos whether formal (expert approved videos being sold on a subscription or one off basis from video learning platforms) or on a non-formal line (such as YouTube videos, TikTok videos, etc).

Overall, while asynchronous videos for post-pandemic remote learning response tend to come up plenty of times throughout the current literature on this recent phenomena, it is clear that the majority of the writings refer to pre-recorded lectures and seminars or pre-recorded practical work performed by university instructors. There has not been much reference to universities using YouTube videos, formal videos from video-learning platforms (such as Coursera, Linkedin Learning, SkillShare, etc), or externally provided expert videos from companies such as Studious Digital Education, Lynda or others. This is an interesting insight on the utilisation of video learning for students given that student interest in using surfing YouTube to acquire new information and learn things has been cited as quite high (refer to section d, part ii). Is it the case that students post-pandemic were not provided with non-university video material for learning, was this medium largely unconsidered post-pandemic research data, or are there other justifications? Primary data derived in this project will play a role in shedding some light on these questions, within the context of the Norwich Business School at the University of East Anglia.

3. METHODOLOGY

a. Research Philosophy and Approach

The research philosophy that will be adopted throughout this study is Interpretivism, which calls for the researcher to enter "the social world of what is being examined" (Wilson, 2014). This approach is most suitable due to the nature of this study which will question student interaction with the video content as well as interview and discuss student impressions on the videos created by Studious in addition to in depth preferences regarding online learning platforms. In terms of research approach, an inductive one will be utilised by beginning with an unresolved gap in literature and move forward towards testing the possibilities of specialised video content effectiveness.

b. Research Strategy and Design

For research strategy, a multi-strategy technique will be implemented in order to gather extensive data in both quantitative and qualitative forms. Moreover, the research design for this proposed study will make use of the case study approach to assess the potential of specialised media in higher education from a current e-learning social enterprise while also introducing new insight into Business students' platform preferences.

c. Data Collection and Analysis Techniques

Data collection for this study will take the form of both secondary and primary research. The secondary research will help in assessing the current practices in academic film production and identifying possible findings on their engagement effectiveness on students. Consequently, primary research will be the focal point of findings. Primary research will take place through a focus group as well as online data collection through a survey. Data from both primary studies will then be collected and analysed based on the NSSE OSE model to track engagement patterns and impressions from undergraduate NBS UEA participants.

Primary Research

Primary research will be the focal point of findings for this research endeavour. Consent will be obtained through a student consent form. The researcher will request each willing focus group participant to sign a consent form which states that all data obtained is for research purposes only, that participants can withdraw at any time and all further terms. Primary research will take place through an **online** student focus group as well as online data collection through a survey. Data from both primary studies will then be collected via written notes, voice recordings, and survey results. This data will then be analysed by the researcher based on the NSSE OSE model to track engagement patterns and impressions from undergraduate UEA NBS participants.

i. Quantitative

Online survey:

To achieve a wide scaled look into how NBS undergraduates interact with online learning videos and how they perceive Studious videos particularly, an online questionnaire was created. The aims of this survey include the following:

- explore video watching habits
- find out course-related video learning preferences
- video searching techniques
- most sought after video learning platforms for course-related learning vs hobby learning
- engagement levels of specialised videos

This questionnaire garnered responses from 401 NBS students of varying years. Since the videos being studied in this project are based on Business subjects targeting various years of study, all undergraduate NBS students are considered. Moreover, Wilson (2010) mentions that no less than 30 participants should take-part in order for statistical analysis to be conducted validly. Therefore, this sample size meets the adequate standard. In terms of sampling, the questionnaire uses a convenience

sampling method which is described as data collection from population members who are conveniently
available to partake in the research (Emerson, 2015). However, this method was used while targeting NBS undergraduates through school email newsletters, emails from their tutors advertising this research and survey advertisements on the UEA's Student Union Facebook portals. This method allows the researcher to reach students through social media in order to gain a diverse range of respondents of varying ages from the school.

Additionally, survey flyers were also distributed to student chat groups via Facebook Messenger and WeChat. Other social media platforms such as Instagram and Twitter were not picked as a distribution route since they did not contain niche student groups where the research survey could be publicised.

The results will be assessed in numerical percentages and majorities vs minority views to indicate levels of engagement identified by students from watching Studious videos and responding to the relevant questions. These findings will ultimately be examined alongside the focus group findings to indicate a possible pattern surrounding today's engagement towards specialised videos and general platform preferences by higher education students.

Accordingly, a 2008 research on consumer emotion measurement states that it is difficult for consumers to define their own emotions towards situations (Sørensen, 2008).
Although this puts a wedge in the survey results, the researcher is able to compare survey opinions against focus group discussions to compare and validate possible discrepancies.

With that said, the survey is split into two parts. The first part of the survey focuses on 'Video Platforms', by asking respondents questions related to their educational video watching habits and platform preferences. The second portion of the survey dives into the project case study, which is the specialised videos being studied. The survey uses

the Online Student Engagement Scale (OSE), which identifies engagement based on four factors in order to uncover engagement potential of the Studious videos when it comes to the target market. In order to do this, the researcher has utilised the existing online engagement scale, which measures skills, emotions, performance and participation - and altered some slight wording to adapt to video content. Additionally, indicators which do not apply to video media have been eliminated from the survey.

Below is the OSE pre-adaption, followed by the fully adapted final product utilised in the online survey:

Online Student Engagement Scale (Dixson, 2010) – before adapting to video:

1.Making sure to study on a regular basis SKILLS

2.Putting forth effort EMOTIONAL

3.Doing all the homework SKILLS

4.Staying up on the readings SKILLS

5.Looking over class notes between getting online to make sure I understand the material SKILLS

6.Being organized SKILLS

7.Taking good notes over readings, PowerPoints, or video lectures SKILLS

8.Listening/reading carefully SKILLS

9.Entering the online class multiple times a week PARTICIPATION

10.Finding ways to make the course material relevant to my life EMOTIONAL
11.Applying course material to my life EMOTIONAL

12.Finding ways to make the course interesting to me EMOTIONAL

13.Thinking about the course between times I am online EMOTIONAL

14.Really desiring to learn the material EMOTIONAL

15.Visiting or calling the instructor with questions about the material and/or assignments PARTICIPATION

16.Emailing or posting questions when I don't understand the material and/or assignments PARTICIPATION

17.Having fun in online chats, discussions or via email with the instructor or other students PARTICIPATION

18.Participating actively in small-group discussion forums PARTICIPATION

19.Helping fellow students PARTICIPATION

20.Getting a good grade PERFORMANCE

21.Doing well on the tests/quizzes PERFORMANCE

22.Being confident that I can learn and do well in the class PERFORMANCE

23.Taking advantage of all class resources (i.e., extra links, readings etc.) SKILLS
24.Engaging in conversations online (chat, discussions, email) PARTICIPATION
25.Critically thinking about my own ethics, priorities, beliefs and values in the context of the class EMOTIONAL

26.Posting in the discussion forum regularly PARTICIPATION

27.Emailing the instructor regarding my grade in the class PERFORMANCE

28.Checking my grades online PERFORMANCE

29.Getting to know other students in the class PARTICIPATION

30.Assessing my own learning and progress in the class PERFORMANCE

Online Student Engagement Scale (Dixson, 2010) – after adapting to video

Please note that indicators in red are those which have been eliminated from the survey due to ineligibility for video media engagement.

"Which of the following apply to you?"

1.I would re-watch this video if I need to revise/remember facts SKILLS

2.Putting forth effort EMOTIONAL N/A to videos

3.Doing all the homework SKILLS

4.I would do follow-up readings on this topic for my course SKILLS

5. I took notes/would take notes if this were for my module SKILLS

6.Being organized SKILLS

7.Taking good notes over readings, PowerPoints, or video lectures SKILLS

8. I listened to this video more carefully than I usually do SKILLS

9.I would watch more videos like this throughout the week for my studies. PARTICIPATION

10. I thought of ways to make this material relevant to my life EMOTIONAL

11. I will apply these topics to my life EMOTIONAL

12.I thought of ways that this topic relates to me EMOTIONAL

13.Thinking about the course between times I am online EMOTIONAL q

14. I desire to learn the material through videos like this EMOTIONAL

15.Visiting or calling the instructor with questions about the material and/or assignments PARTICIPATION potential

16.I watched the entire video? PARTICIPATION

17.I would be interested in participating in online chats, discussions with the instructor or other students regarding videos like this PARTICIPATION

18. This video would inspire me to take part actively in small-group discussion forums PARTICIPATION

19.I would be able to help explain this topic to other students after watching this video PARTICIPATION

20. I would use videos like this to help me get a good grade PERFORMANCE

21.Doing well on the tests/quizzes PERFORMANCE

22.I would you be confident that I can do well in a quiz on this video topic PERFORMANCE

23.Taking advantage of all class resources (i.e., extra links, readings etc.) SKILLS
24.Engaging in conversations online (chat, discussions, email) PARTICIPATION

25.I can critically think about my own ethics, priorities, beliefs and values in the context of this video EMOTIONAL

26.Posting in the discussion forum regularly PARTICIPATION

27. I would be interested in emailing my instructor questions related to this video PERFORMANCE

28.Checking my grades online PERFORMANCE

29. I want to hear more from the speaker in this video PARTICIPATION

30.Assessing my own learning and progress PERFORMANCE

These four skills have been described by Dixson in more detail in her 2015 study which covers measurement of online engagement (Dixson, 2015), (Figure 15).

ii. Qualitative

Focus group:

In order to dig deeper into the responses accumulated through the online questionnaire, a focus group with NBS undergraduates took place. This sets the tone for the research by developing a clearer understanding of how students navigate video learning and how they feel about each video presented.

Norwich Business School undergraduates were recruited to this focus group using similar streams to the online survey. The focus group flyer was distributed throughout social media groups on Facebook and Facebook Messenger intended for undergraduates. The flyer was also distributed by Business school professors and admin to the undergraduate mailing list which is only accessible by school personnel. The flyer included information about the study, information about the researcher, the date and time it will take place and the incentive to join. The incentives included £10 Amazon vouchers to students who successfully join the focus group and contribute to the discussion.
However, in order to take part in the focus group, students must have completed the prerequisite of completing the survey first. This encouraged more participants to fill in the survey and allowed approved focus group participants to come prepared to the focus group regarding what the subject of the conversation will be. Additionally, three survey respondents were to be picked at random to win an additional £5 for their contribution.

Speaking to students who come from diverse courses of study and expertise allowed the researcher to have a wider look into the practice of video learning and a more general idea of the extent to which certain video platforms are preferred over others. Ultimately, 6 student participants took part in the focus group.

The following is a list outlining the student participants who took part in this focus group along with their school of study and year of study. Since these participants are anonymous, as per the terms of the research confidentiality agreement, the only identifiable data is their year of study. The ‘alias’ refers to the title they will be addressed as throughout this study.

Student Alias	School of Study	Year of Study
Participant 1	NBS	Year 2
Participant 2	NBS	Year 2
Participant 3	NBS	Year 1
Participant 4	NBS	Year 2
Participant 5	NBS	Year 1
Participant 6	NBS	Year 3 (final year)

iii. General Conclusions Related to Research Design

This research is analysed in two phases: the first is a review of survey findings by assessing response outcomes, identifying any relevant patterns and highlighting any information which raises new questions. Additionally, this section will cover engagement levels uncovered and compare between such levels across the various video categories introduced. The second part of the analysis focuses on focus group results. This will assess student feedback on video learning platform favourites and instant thoughts on videos created by Studious Digital Education. The survey largely uses the. Likert scale to gauge participants' degree of preference and feelings towards the videos, using a scale of 1 to 5 to assess the factors of the online student engagement model. The questionnaire also utilises short-answer forms and multiple choice and check-lists to derive further student insight. With that said, the analysis of these results will be broken down into two individual sections in order to develop a focused analysis of both portions

of the survey (video preferences section and case study section). In both sections, the researcher will refer to relevant discussion from the primary research or secondary research when needed. A final section of results will address any observed patterns or discoveries of the findings.

4. Analysis and Results

c. Survey

After researching literature surrounding the topics of video media for communication, uses in learning, social media role, engagement theories and more, the research will delve into the minds of consumers. This portion of the research will assess feedback from 401 questionnaire respondents on their video platform preferences in learning and outside of learning then will take a closer look at specialised video responses to gauge engagement extent. Questionnaire results will be discussed and compared with expert opinions in areas where relevant. Research from section 2F will also be referenced when relevant; however, due to the gap in literature regarding online video learning engagement, primary research will hold focused consideration throughout the analysis.

i. Video Platforms

This survey initially began to circulate at the start of June of 2021 alongside the focus group flyer. Despite the questionnaire being checked and ready to welcome respondents, it did not receive any traction. Days had gone by without any respondents. Upon re-assessing the environment and timing of the survey, it was flagged that summer months, particularly June, are the lowest calendar periods in which students are likely to engage in volunteer activities such as surveys, despite potential incentives.

While students have been found to come back to university with an increased improvement in narrative skills and writing composition, they have low levels of involvement regarding university or education related activities during summer (Bowers and Schwarz, 2018).

Added to that, students are also less likely to check social media channels, emails and group chats related to their institution during summer vacation - which is where this project was advertised. Since postgraduate students, for the most part, do not have summer holidays, the study received some interest from that group of learners. However, these offers of participation were rejected since this project focuses on undergraduates only.

Moreover, to increase probability in receiving responses, the lengthiness of the survey was reduced and simplified. Therefore, the minutes it took to complete the survey were also edited in the flyers and re-advertised and re-published. Following these improvements, the survey began to pick up responses 3 weeks into June. However, it was not until November 2021 when students began flooding the questionnaire with their thoughts and opinions. This potentially may be due to several reasons including the following:

- the busy environment of welcome week had slowed down
- the student social media channel received many new users joining in October
- Holidays were coming up and therefore, the monetary voucher incentives were becoming an increasingly attractive factor

- The NBS administrator emailed the flyer to the undergraduate mailing list again in November

Ultimately, the survey garnered enough responses to proceed with the study. The majority of the student respondents were in their second year of university, making up 51.4% of survey goers. This was followed by third year participants and finally first year students with the lowest rate of 90 students. This is interesting to note because, while first years might arguably hold the most valuable views here because they will be at university for longer, and therefore, future considerations in media use would primarily apply to them, they seemed to be the lowest to engage with the research. A 2008 study from the *Journal of Higher Education* reports that first year student involvement when it comes to the Online Engagement Scale (OSE) and Beyond-class Engagement Scale (BES), reveals lower rates of activity than those of second and first years. (Krause and Coates, 2008).

These findings refer to online and beyond-class activities related to education such as this research project. This view falls at odds with the notion that new students tend to be more generally academically involved due to the novelty and anxiousness of their new environment (Leathwood and O'connel, 2003). However, other studies suggest that high performance and activity does not relate to the year of study, but rather to the extent to which a student requests teacher feedback (Kuh, 2007, p.4). This Indiana University research into Higher Education notes that students who request and receive feedback as well as communicate with their teachers are also more likely to be satisfied with their university or school of study (Kuh, 2007, p.4). This can be significant to

consider in the context of this research early on because video learning does not in fact provide such feedback and two-way communication. Could this be a factor that could affect engagement metrics in section two of the questionnaire? This will be considered later on.

Moving on, when asked if respondents tune into videos which relate to their course of study, more than 80% said yes and only 2.5% (10 students) said they do not watch such videos (Figure 19). At this early stage in the feedback, it is unclear the motivation behind watching the videos however, it is a clear flag that educational videos are indeed prevalent.

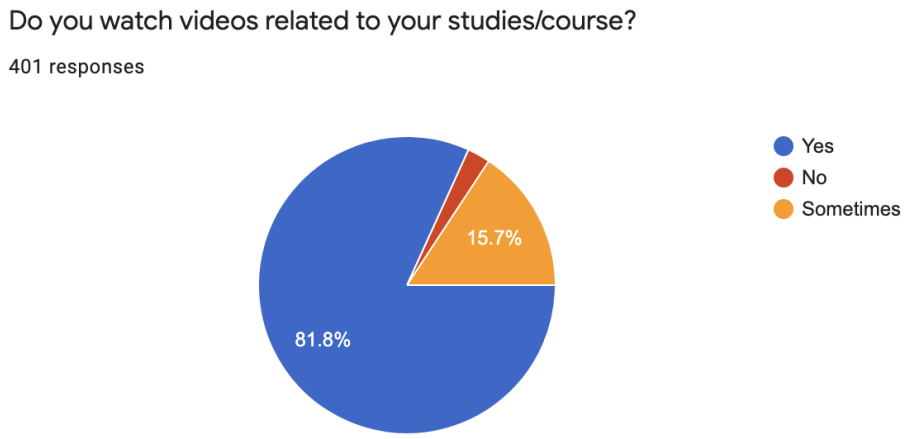


Figure 19: Respondent behaviour: watching videos related to their course

Next, participants were required to report where the source of this media is from; their instructors, their own research or both. In this case, most students came back to say that these videos were provided by their university or directly from their instructor. Only 20.9% shared that they acquire the videos on their own. However, it is still important to

consider that just over 35% of participants mentioned that they acquire the videos through both avenues (Figure 20). Self-taken initiative to watch video learning media is no surprise here as studies in Section D. ii, indicated high volumes of users (more than half of viewers) heading to YouTube to 'learn something new'(Smith, et al., 2018). This also might have ties to the fact that students were subject to at-home learning for just under two years due to COVID-19 (Burki, 2020). Being unable to have quick access to communication with teachers for low-urgency questions such as during the pre-COVID in classrooms and frequent office hours era may potentially lead students to research their own form of learning via video.

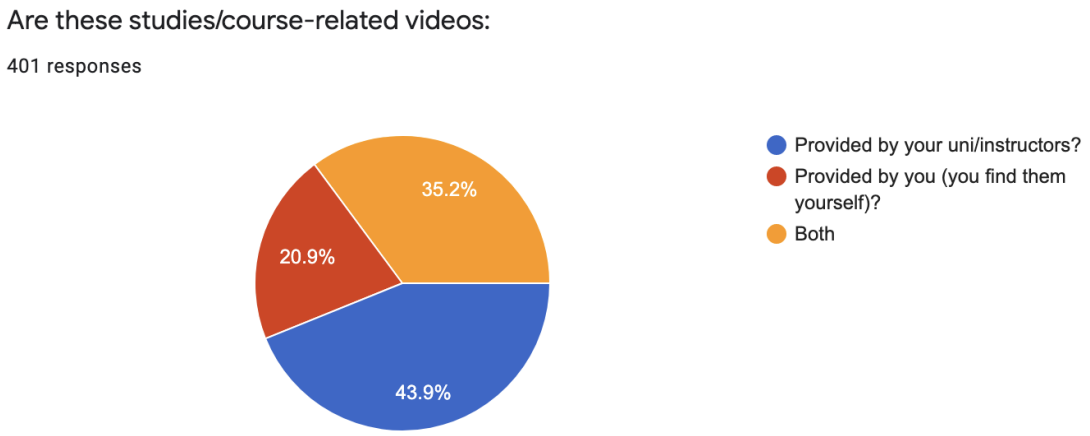


Figure 20: Respondent behaviour: video provider

Accordingly, the study begins to further investigate the medium in which student videos are being watched. How do students search for course related videos? Between instructor linked videos, Google, asking friends and going directly to the platform website, 144 students chose Google (Figure 21). This was closely followed by 132 respondents saying they watch whatever their instructor links. Asking friends came next

and at the lowest was going directly to the source. These insights slightly contradict the previous results which point out that students mainly watch instructor provided videos when it comes to their learning. However, one can argue that it might be quicker to Google the titles of videos suggested by instructors than it is to log into student portals such as Blackboard.

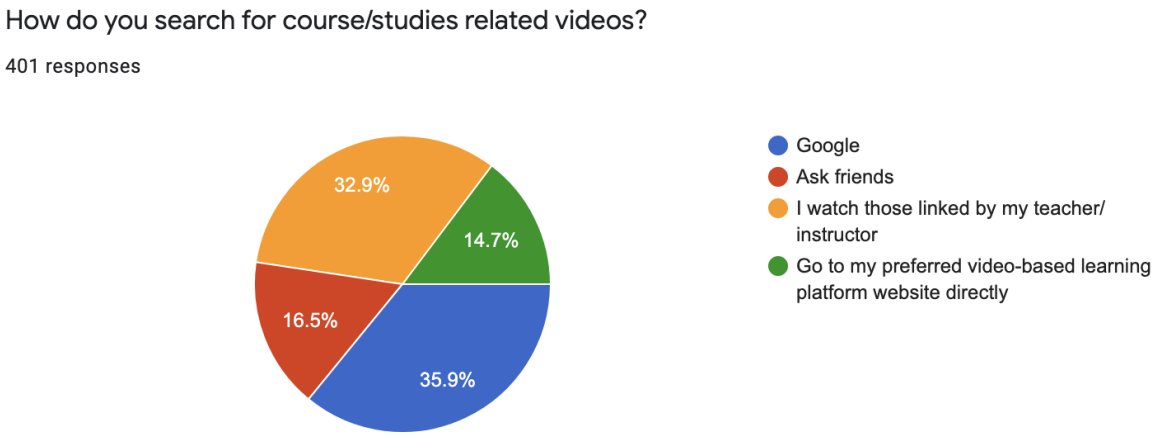


Figure 21: Respondent behaviour: video searching habits

After initial motivations and video acquisition has been shared, the discussion moves towards specific video platforms. Here, students were asked to pick one or more of the platforms they access for the course-related videos mentioned above. Results revealed that YouTube ranks first yet again, at a 64.8% vote rate, followed by Coursera and Blackboard. While this survey is revealing that many tutors use YouTube as their choice to provide supportive video content for their materials, it is significant to remember that BlackBoard also employs its own built in video player for media content. Therefore, with YouTube ranking first and Blackboard third, it might be that instructors are uploading self-filmed videos directly to Blackboard. In the case of Coursera landing second place, this is a surprising insight because it is a paid subscription provider with professional

style videos varying greatly from the more laid back YouTube learning videos and also has not garnered the best reputation regarding users' data privacy (Jones and Regner, 2016). However, as Section 2D. i. indicated, Coursera is among the top two most successful online learning communities over the COVID-19 pandemic, partially owed to their brand association with world class universities very prominently on their website homepage (Figure 13). Additionally, Coursera received a massive push in users during COVID-19 lockdown, seeing a push from 1.6 million to 10.3 million users worldwide - the largest increase for a HE video platform sign-ups that year (Impey, 2021).

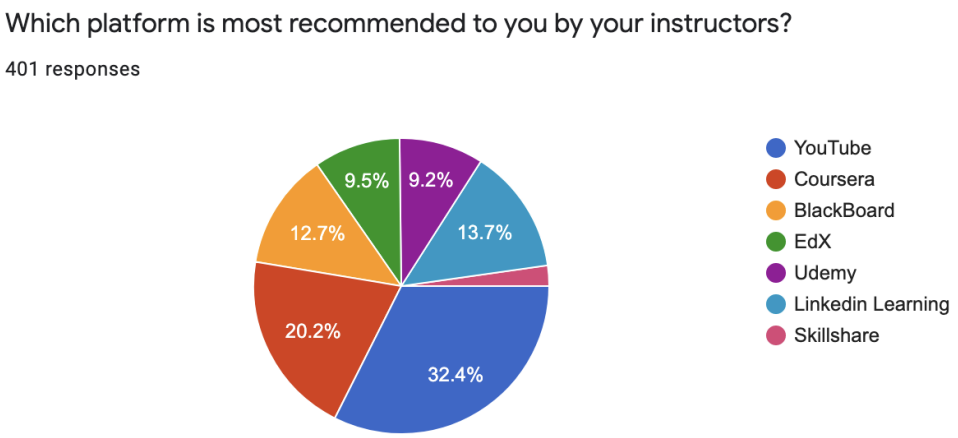


Figure 22: Respondent behaviour: platform recommendations

To reiterate the above information from a different lens, respondents were asked to share platforms most *recommended* by their instructors (Figure 22). The same lineup was the result as when students were next asked what *their* personal platform preferences are (Figure 23). In terms of platform preference, this is good news to university personnel, given that the output of recommendations matches the student preferences cited above. Skillshare coming last place is fascinating to observe. One can

consider that this is due to Skillshare being the highest platform among this crowd (apart from YouTube of course) to be least attributed to higher education and more so toward skill building. With that said, as mentioned in section 2D. ii., Skillshare contains the most diverse style of video media among the platforms mentioned. While Coursera, which ranks very high for student preference, contains videos created with similar levels of professionalism, production style and credibility. Then again, Skillshare's video styles may be the closest in laid-back nature to YouTube than any of the others. Another factor to consider might be monetary factors. Why might a student pay to watch freelance creatives and independents host their videos on Skillshare when something very similar in fashion can be found for free on YouTube? These findings raise new questions related to the importance of consistency and monetary motivation - or lack thereof.

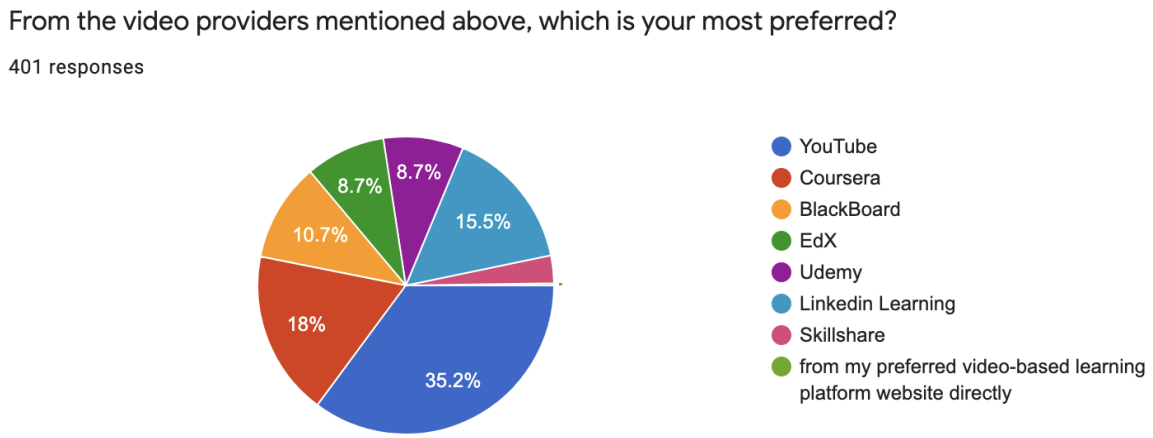


Figure 23: Respondent preference: video providers

Consequently, the questionnaire moved into the question of utilising video media to gain new information for personal skills or hobbies. Firstly, respondents were faced with, 'For personal skills or hobbies, do you use different video learning platforms?'. To that end,

87% of students said yes, with 7.5% (30 students) stating that they do not use video platforms at all for their skills and hobbies (Figure 24). This question is important because it allows respondents to separately consider if they indeed use varying platforms in their personal life, from their own recollection, before being presented with the options once again.

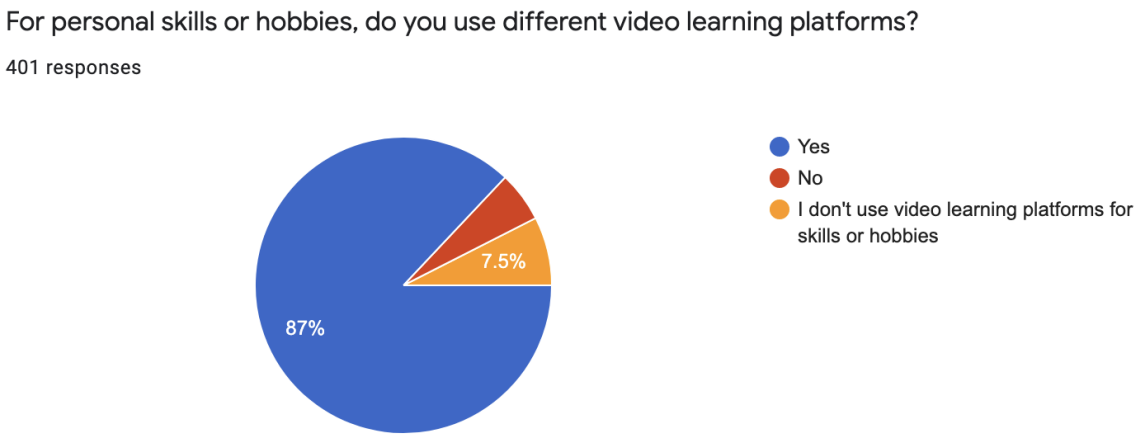


Figure 24: Respondent preference: skills and hobbies differentiation

The final question of this section requested that students tick one or multiple of the video platforms they use to watch videos for their own personal skill improvement or hobby exploration. Once again, YouTube was the crowd favourite at 54% usage for skills/hobbies, followed by Coursera and Linkedin Learning. What is notable here is that between academic video learning preferences (Figure 24) to personal video learning preferences (Figure 25), Linkedin Learning has moved up 3 levels. Although Linkedin Learning is actually provided free of cost at full access to UEA NBS students (target respondents here), it does not seem to be recommended by instructors as shown in previous results, nor is it a point of attraction for HE students looking for video support alongside their classes. However, Linkedin Learning climbed the ranks for skill building.

This may be attributed to its free access. However, even then, it could not surpass Coursera. A final point to consider here upon reflection is that Coursera 'specialises' in these learning videos whereas for Linkedin, its learning subgroup is an added feature to its wide-scale professional online networking platform. Could brand specialisation play a role in student's media consumption preferences?

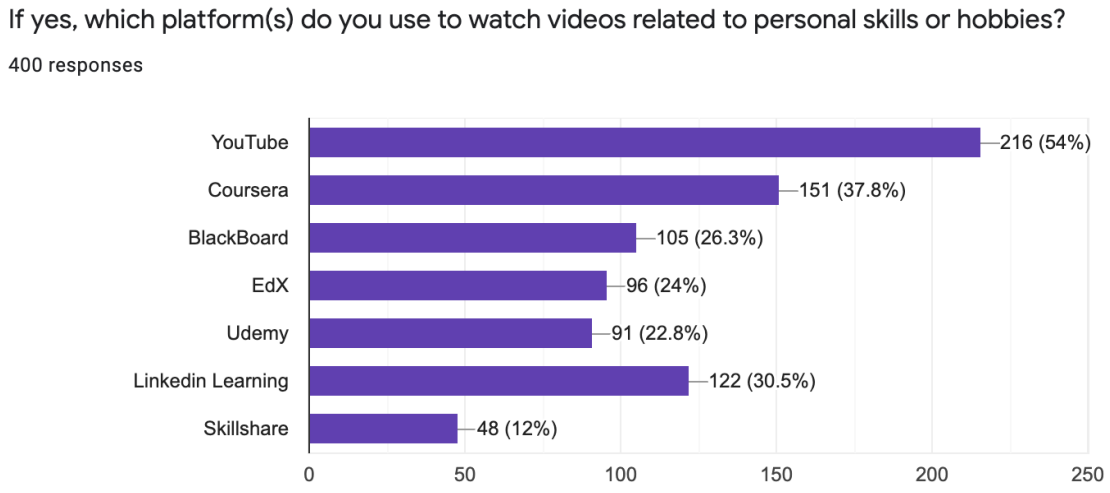


Figure 25: Respondent preference: skills and hobbies

ii. Studious Video Engagement

The second segment of the questionnaire aims to pin down the levels of engagement of each Studious Digital Education video presented in this study. Survey respondents are presented with four different educational videos on a business topic. Each of the four videos is a different category of specialised video produced by the company. These four video categories are: animated explainer, short explainer, academic case study and academic feature. The respondents are presented with each video along with its title

and a short one-line explanation of what this video style entails. For reference, these are detailed below:

1. **Video 1 / Animated explainer:** Animated explainers centre on an expert description of a concept, but use animation in addition to video to facilitate understanding.
2. **Video 2 / Short explainer:** Explainers are bite-sized (1 minute) pieces about a single idea or theory. Each video is built around an explanation from an academic expert and illustrated with archival and contemporary footage.
3. **Video 3 / Academic case study:** Case studies aim to capture real insight into companies, practitioners and research experiments.
4. **Video 4 / Academic Feature:** Feature videos combine academic interviews and voice-overs with animation, archival materials and high-definition footage.

Following each video introduction, a complete list of identifying factors of the online student engagement scale (OSE) adapted for videos, was presented for each video in check-box format. Each identifying factor correlates to one of four engagement forecasting features: skills, participation, emotion and performance. These four features (Figure 26), are not presented to participants in the questionnaire, they are only for use by the researcher in order to use these to identify engagement or lack of engagement with the different styles of video presented. For instance, one of the questions being asked to a respondent after watching the video is to identify whether they would ‘re-watch this video if I need to revise/remember facts’. This is an identifiable factor for the

OSE, however as the researcher, I also know that this statement relates back to the feature of ‘SKILLS’ and so on.

Table 2

Item Distribution Across Factors

Skills	Emotion	Participation	Performance
Study regularly	Put forth effort	Have fun in online chats	Do well on tests
Stay up on reading	Find ways to make materials relevant	Participate actively in forums	Get good grades
Look over class notes	Apply to my life	Help fellow students	
Be organized	Find ways to make material interesting	Engage in online conversations	
Listen/read carefully	Really desire to learn	Post regularly in forum	
Take good notes over readings, PPT, video lectures		Get to know other students	

Figure 26: *OSE Feature Descriptions: Revised Model* (Dixson, 2015).

The way in which this study will assess engagement based on this model will be by calculating the extent to which all four touchpoints (skills, emotions, participation and performance) are collectively active for each of the four videos presented. Since more than three touchpoints are being averaged, it can be inferred that a total touchpoint average below 45 would be considerably low engagement; those between 45 and 54 to be average engagement and 55+ to be high engagement. With that said, in order to try to identify why each video is at a low or high engagement result, a group of additional factors have been identified by the researcher to identify the reasoning. These added video media considerations incorporate the following:

- production value (quality of video and editing)
- learning (easy to understand and informative)
- entertainment (entertaining and/or amusing)

These additional metrics allow this study to report results beyond just engagement levels and provide new factors which can be considered by future researchers looking at OSE in video media.

Moreover, the first video presented is the Animated Explainer. This is a one-minute-long video which uses animation to explain a beginners Business concept, which in this case is the Simple Structure.

Engagement levels:

Video 1: Animated Explainer	Skills	Participation	Emotional	Performance	Total
Average engagement	57.1%	46.3%	50.14%	57.05%	52.7%

Figure 27: Video 1 Explainer touchpoint outcomes

While video 1 was only a short one minute long, the total engagement turned out quite average. The highest features were firstly skills, which includes skills-based habits such as incorporating the content of this video into studying routines. The second highest was performance which includes action taken following the video such as using it to improve performance and performing really well on the topic. Despite the high promises of performance, the lowest feature engagement was participation, which indicates involvement and activity during the video. The highest marker here was an interest in taking part in online discussions on the topic (63.3%), while the lowest marker was the interest in the host (19.2%). This suggests that animated explainers might not

necessarily need a human host throughout the narrative and that this may distract from the participation engagement levels.

Moving on, the next section introduces the additional metrics of production value, learning and entertainment, which might help explain the engagement stats further. While these three factors are not a part of the OSE model, they have been raised throughout literature and are proposed in this study as having a potential to unveil new perspectives for engagement measurement.

Additional metrics:

Video 1: Animated Explainer	Production value (quality of video and editing)	Learning (easy to understand and informative)	Entertainment (entertaining and/or amusing)
Highest score on likert scale	4 (44.1%)	4 (47.4%)	4 (41.1%)
4 and above	71.3%	70.8%	65.3%
Lowest score	1 (1.2%)	2 (3.2%)	2 (5.2%)

Figure 28: Video 1 Explainer additional factors outcomes

Based on the additional findings, this video ranked lowest for entertainment. This is interesting when it is considered that animated videos are created largely for entertainment purposes in learning. However, this video is not wholly animated, but largely so. On the positive end, this video was considered easy to understand and informative by the majority of respondents. The production value was also seen as high. These findings coincide with a 1994 study (mentioned in section 2.D. i.), which reported that animated videos have shown no evidence of impacting student engagement, but have shown to improve learning and retention (Beheshti,et al., 1994, p.527). However,

the most recent look into the matter reported that watching 'cartoon-style' explainer videos do increase engagement, interest, understanding and self-directed learning. However, cartoon-style is not enough direction for video-makers. Taylor et al (2018) argue that the key to deriving engagement when it comes to this category of videos is to master storytelling throughout. Overall, experimenting with different styles of animation, stronger story-telling and testing the category without a 'talking head' may potentially increase engagement levels.

The second video presented is the Short Explainer. This is a video, just under two minutes or less, which provides an explanation from an academic expert and illustrated with stock footage. This Short Explainer discusses the concept of Socialisation by an NBS professor. Throughout this video, the professor discusses the meaning behind socialisation while viewers briefly see her talking and watch a range of related stock footage as she speaks. The professor also uses Disney to exemplify the topic at hand.

Engagement levels:

Video 2: Short Explainer	Skills	Participation	Emotional	Performance	Total
Average engagement	58.3%	46.2%	50.3%	56.4%	52.8%

Figure 29: Video 2 Explainer touchpoint outcomes

The short explainer touchpoints see high engagement levels in the *skills* segment and lowest rates in *participation*. For *skills*, one of the indicators actually received a sky-rocketed vote of 72.1% (Figure 29). The *skills* indicator was 'I would do more readings

on this topic for my course', followed by note-taking. This shows engagement in terms of self-initiative and motivation. The second highest indicator was *performance*. This is due to high interest towards watching videos like to 'to increase knowledge about business topics and a willingness to raise questions to teachers via email. When it comes to participation, which is yet again the lowest touchpoint, it is seen that the same indicator has dragged the average down for the entire touchpoint. This one is 'I want to hear more from the speaker in this video' at 23.4%. One can begin to determine that students show little interest in video hosts or speakers, but are rather interested in the content and how it can help them. This connects to the *emotional* touchpoint, in which the majority of respondents said that they 'can apply these learnings to (their) life' and that they 'desire to learn the material through videos like this'. In fact, out of all touchpoints, the *emotional* one received the most consistent rates while the remaining four were more staggered.

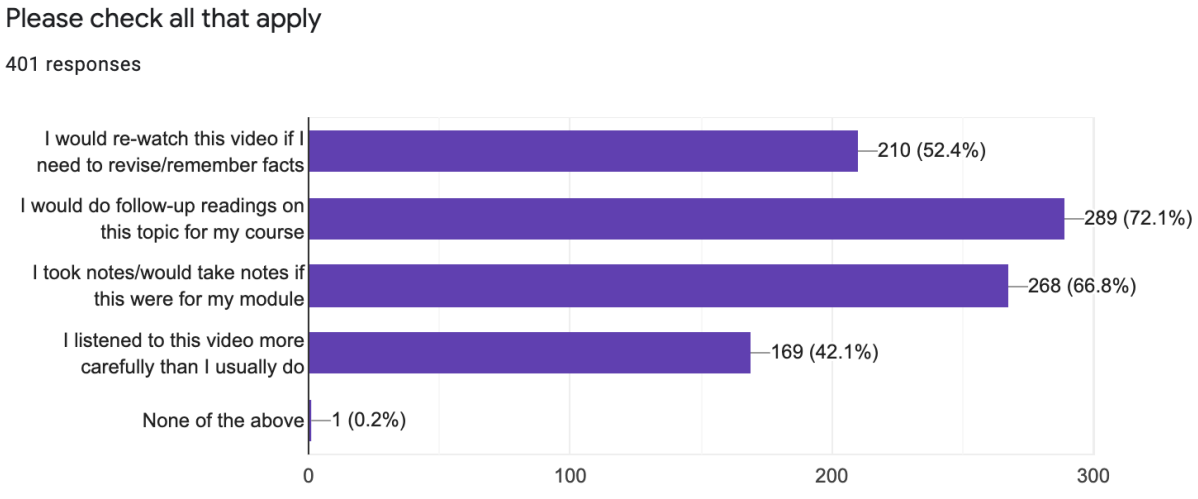


Figure 30: Video 2 emotional touchpoint (Research survey, 2021).

Additional metrics:

Video 2: Short Explainer	Production value (quality of video and editing)	Learning (easy to understand and informative)	Entertainment (entertaining and/or amusing)
Highest score on likert scale	4 (41.6%)	4 (37.2%)	4 (43.4%)
4 and above	71%	66.1%	67.1%
Lowest score	1 (0.2%)	1 (0.2%)	1 (0.2%)

Figure 31: Video 2 Short Explainer additional factors outcomes

The added metrics for video 2 are in very close range to one another. However, while entertainment was the lowest for the Animated Explainer, it rose to second for the Short Explainer. The Short Explainer, and in particular this example, often includes animated clips as a part of its video montage. However, it is mostly a mix of varying forms of visual media. The variations here may have played a role in the higher entertainment rates as opposed to the Animated Explainer which only utilised the talking head and one style of animation.

Consequently, the lowest metric is learning. Despite the learning metric ranking in majority within the ‘green area’ or the positive end of the likert scale, it should still be assessed what led to the lower stance in this case. Could the extent of mixed media have caused a wedge in the learning potential of this video? It is hard to say. However the focus group might shed more light on the matter. Finally, production value came in first here, which may be linked to the use of additional video angles and more cutaways.

Based on this, one might argue that there may be a link between higher entertainment value when the production metric is also high.

The third video presented is the Academic Case Study. These are usually no longer than 6 minutes and aim to place the student viewer into the real world regarding educational topics. This case study revolves around the subject of communication as seen at L'Oreal and is filmed at their HQ office in London. Throughout this video, various L'Oreal employees explore the topic of communication, its importance and how it is dealt with in their company. In regard to filming and editing style, it is clear that there is no stock footage used and all cutaways are filmed at the location of the shoot.

Engagement levels:

Video 3: Academic case study	Skills	Participation	Emotional	Performance	Total
Average engagement	57.6%	47.3%	50.1%	56.6%	52.9%

Figure 32: Video 3 Academic case study touchpoint outcomes

In regard to engagement levels using the OSE model, the skills touchpoint ranks highest once again for the third video in a row. In skills, this video also ranked highest among the past three for re-watchability. However, a lower number of respondents share that they would do follow-up readings for their course. One caveat with this indicator is that it can be perceived as negative or positive depending on the situation. For instance, utilising follow-up learning is deemed as a great skill for engaged students to have, however, some engaged students may have already absorbed the information from the video and no longer need follow-up engagement on the topic. Regardless, the

academic case study has received the highest total average for online student engagement thus far. The lowest touchpoint again being attributed to participation due to the low of host/speaker interest. Despite this pattern, even the indicator of host interest ranks highest among all the videos studied (Figure 33). This highlights that the industry location style approach of case study videos and the interviewing of practitioners is deemed more engaging to students than those of academic personnel.

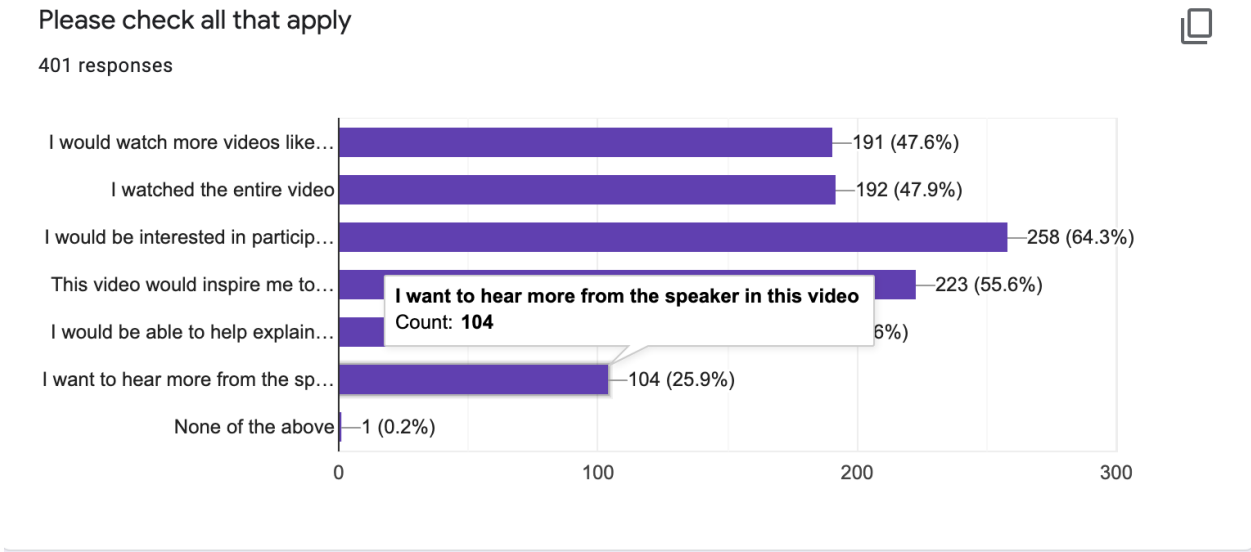


Figure 33: Video 3 Participation touchpoint

The additional metrics also revealed useful insight surrounding video 3 (Table x, below). Responses indicated that the case study was most valuable when it comes to ease of learning and information absorption. What is notable is that this video also received the highest emotional touchpoint indicator for making students reflect on their own ethics, beliefs and values. Research has shown that students are able to comprehend concepts better through media when they can empathise or put themselves in the shoes of the topic discussed (Pietri, 2021). This research states that students desire to learn

about topics when they feel that it relates to them too, particularly in video format (Pietri, 2021). This is followed by its production value at 73.1% and lastly, its extent for entertainment at 66%. Despite receiving the highest overall OSE touchpoints average and high likeliness for rewatchability, this entertainment aspect still did not surpass the rest as did in video 2. There is a huge difference between the lengthiness of video 2, which is just under two minutes and video 3 which is almost 6 minutes. This decrease in entertainment votes could come back to Section 2C, which outlines a growing trend in 'snappy' or short video content as the new form of entertainment for engaging Gen Z and potentially millennials (Song, et al, 2021, p.2).

Additional metrics:

Video 3: Academic Case Study	Production value (quality of video and editing)	Learning (easy to understand and informative)	Entertainment (entertaining and/or amusing)
Highest score on likert scale	4 (42.4%)	4 (46.9%)	4 (43.6%)
4 and above	73.1%	73.3%	66%
Lowest score	1 (1%)	1 (0.2%)	1 (0.7%)

Figure 34: Video 3 additional factors outcomes

The final video reviewed in the questionnaire is video 4, Academic Feature. This category of specialised videos can last from 4 minutes up to 9 minutes at most. This style is the longest but also the most inclusive of different elements such as quotes, voice-overs, animation, archival materials and high-definition footage This video storylines the meaning behind entrepreneurs and start-ups. This one is 5.3 minutes

long and follows a singular narration throughout a range of visuals, photos, clips and animation.

Engagement levels:

Video 4: Academic Feature	Skills	Participation	Emotional	Performance	Total
Average engagement	58%	46.8%	50.4%	56.9%	53%

Figure 35: Video 4 Academic Feature touchpoint outcomes

When it comes to the four touchpoints, skills such as active listening, note-taking and rewatching potential score the highest (Figure 35). This leaves all four videos in this case study ranking highest with skills engagement. Next is the performance touchpoint, reaching 56.9% average engagement, particularly for getting involved in online discussions with peers and instructors regarding the topic viewed (Figure 36). From an emotional standpoint, respondents mostly felt that they can both apply this video's learnings to their life.

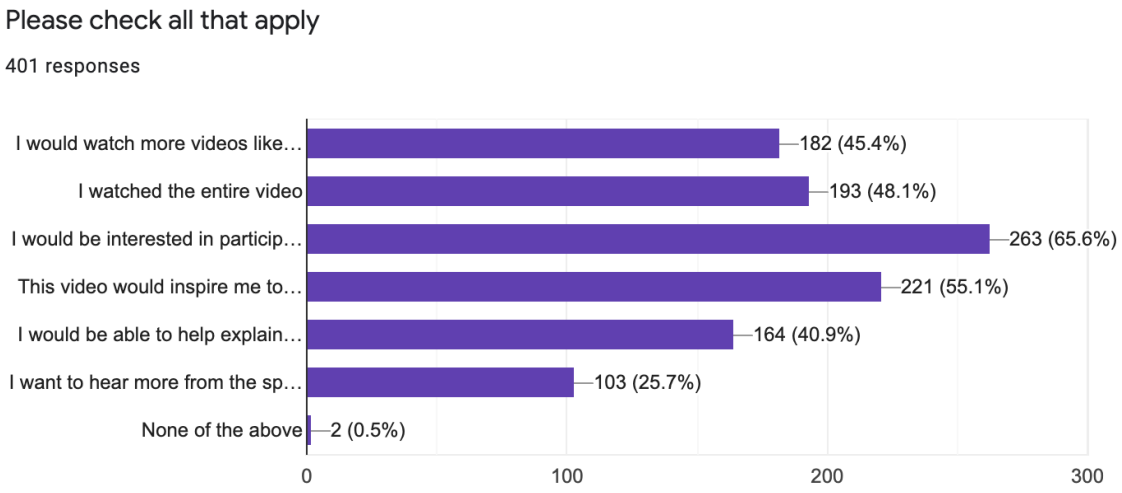


Figure 36: Video 4 Participation touchpoint (Research survey, 2021).

Consequently, more than half of the students shared that they thought of ways in which this topic relates to their life while watching video 4. In fact, this final video evoked the highest emotional appeal for the respondents among all of the videos. This video was also the second in line to allow students to reflect on their own ethics and beliefs while watching. Participation ranks least for the fourth time due to low scores on interest in the narrator (Figure 36). With the consistent pattern of self-interest rather than any external-person interest, it can be inferred that it's not the four hosts or narrators of these videos who cannot incite engagement, but rather that students simply focus on the information and what they can extract and use rather than what video 'symbol' or figure they like or do not like. Even when the emotional touchpoint is high, the host is still of little concern to respondents. Nevertheless, the total average of this video holds the highest level of engagement thus far, with only a 0.1 difference to the L'Oreal Academic Case Study.

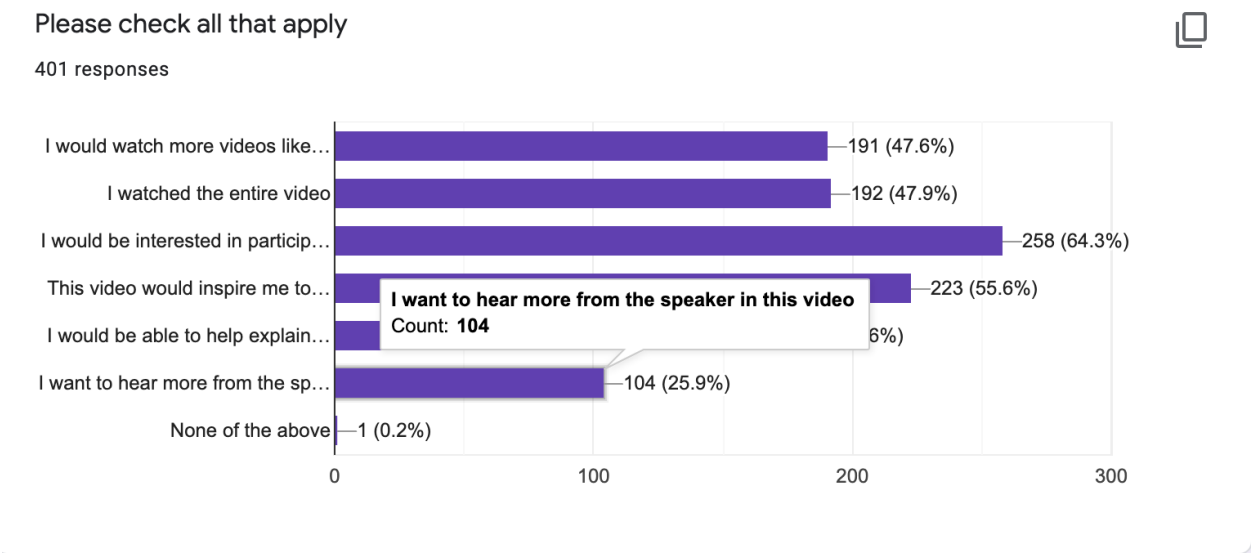


Figure 37: Video 3 Academic case study Participation touchpoint outcomes

So, what might have led to the elevated interest in video 4? As a start, this video has received the highest 'green zone' averages across all three of the proposed support metrics. According to the results, the academic feature was also the most praised for its production value, learning and even entertainment. The reigning factor was production value at 76.1%, followed by learning and entertainment, respectively. Ultimately, the high engagement levels noted above may be attributed to the fact that respondents identified harmony amongst the three factors below. Despite the studies outlined which refer to shorter videos yielding higher engagement, the best performing video in this case study is actually the longest. This raises the question of whether length is truly a hindrance if the topic is deemed relatable? Additionally, several factors may contribute to this video's performance. The attributes which differentiate video 4 from others include the following:

- Longer than the others
- Contains more mixed media

- Does not include any interviews
- Does not include talking heads
- Narrator is speaking to audience directly (grammar-wise)
- The topic may be more relatable to Business students' personal lives than the rest
- Nostalgic element (cartoons presented)

Additional Metrics:

Video 4: Academic Feature	Production value (quality of video and editing)	Learning (easy to understand and informative)	Entertainment (entertaining and/or amusing)
Highest score on likert scale	4 (42.9%)	4 (44.1%)	4 (45.8%)
4 and above	76.1%	70.8%	70.6%
Lowest score	1 (1.7%)	1 (0.5%)	1 (0.3%)

Figure 38: Video 4 additional factors outcomes

Moreover, to wrap up this survey, the researcher asked respondents to directly provide which video in particular was; A) most useful for learning and B) the most entertaining. The purpose behind this is to assess whether respondents' answers match the results of the OSE model as well as their additional metrics votes. To specify, this will help the study identify whether initial video preferences match the engagement levels identified. Accordingly, in terms of learning, the video voted most useful was in fact, video 3, the Academic Case Study (Figure 39). Although the average calculations rank the academic feature as highest in learning, it is the case study that is chosen upon final

reflection. More alarmingly is that the academic feature actually comes last. What can be noted here is that the question's wording asks which video 'style' is most useful rather than which of the videos you've watched above is most useful for learning. What might be considered is that the respondents are now reflecting on the video category rather than the particular topic video viewed above.

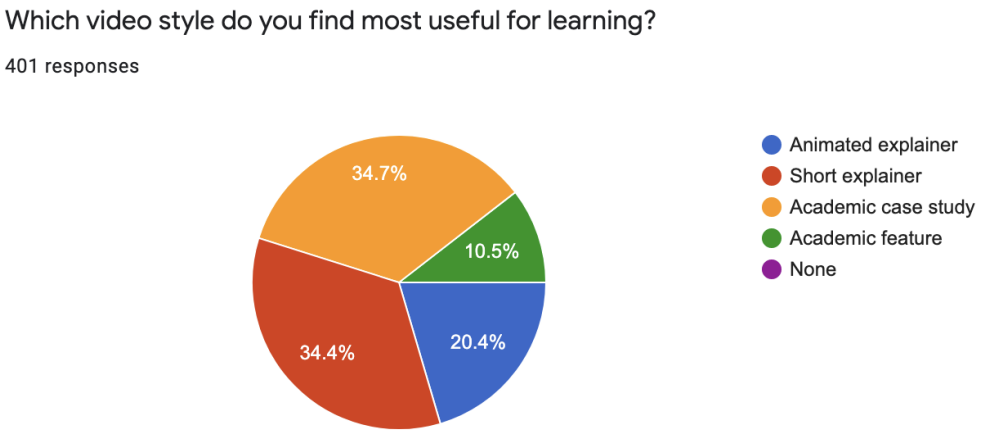


Figure 39: Respondent preference: learning metric outcome

Lastly, the questionnaire users are requested to choose the video style they deem as most entertaining (Figure 40). The outcome was very close-knit. Majority (28.2%) shared that the academic case study video style is best for entertainment purposes, followed by the short explainer, the animated explainer and at last place, the academic feature. This research can argue that while students do not particularly find 5-9 minute academic features exhilarating to watch, the version presented above reigned high in engagement and added metrics due to its topic relatability and emotional appeal. With that said, the focus group in the coming section will shed additional light on the average

engagement results calculated versus the preferences indicated directly from the students.

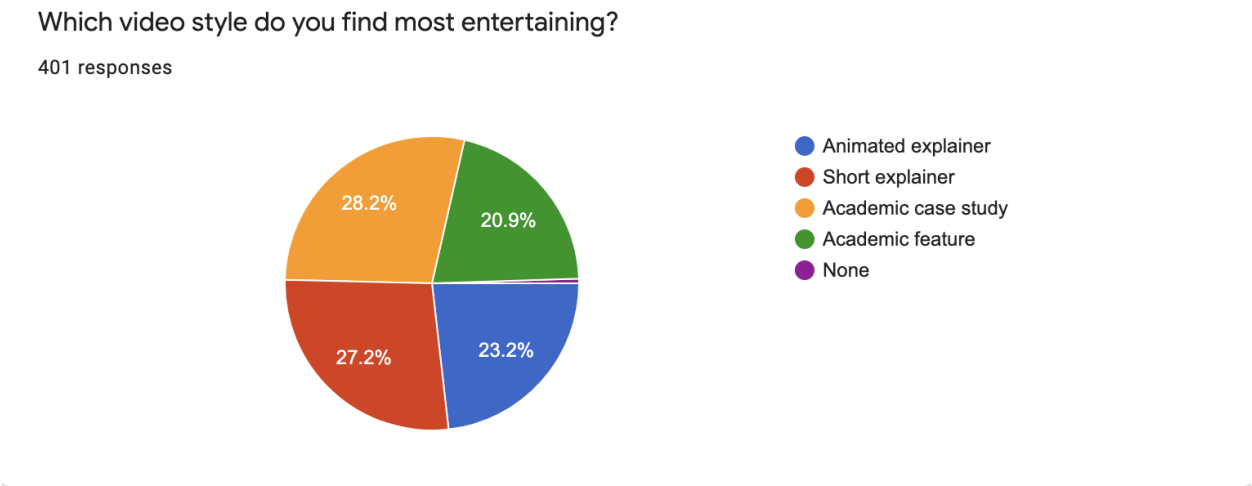


Figure 40: Respondent preference: entertainment metric outcome

B. Research Focus Group

Once the survey had received an adequate number of responses, the focus group was ready to take place. Survey respondents who were interested in joining this second part of the project left their email where indicated and were contacted by the researcher in due course. However, many respondents were only interested in being a part of the prize draw or possibly having their voices heard and therefore, did not express interest in joining the focus group. Overall, 397 respondents indicated their interest in joining the focus group by leaving their email in the form, in order to be contacted by the researcher. Among this pool, 20 student emails were chosen at random and emailed with an invite to the focus group. Ultimately, the first 8 to respond were confirmed to join, with two of these standing in as a backup, in case any of the initial 6 back out.

In terms of structure, the focus group is split into three sections.

i. Session 1 / Study related videos / warm-up and platform preferences

ii. Session 2 / Hobby related videos / platform preferences

iii. Session 3 / Case study videos / engagement levels

Session 1 / Study related videos / Warm-up and platform preferences:

Session 1, part 1, focuses on general introductory questions related to video-watching for study. This is followed by more focused discussion surrounding video platform preferences. This portion of the paper will follow key findings and highlights of the focus group in a chronological manner. This focus group included 6 participant students studying in the Norwich Business School at the University of East Anglia. Of the 6 participants, 3 were second years and 3 were third year.

When asked if the students watch videos related to their studies, the majority of the participants shared that they either only watch videos related to their course when they want to understand a concept or when they are presented with one by their teachers. This is interesting because it suggests that students do not often go out of their way to watch study-related videos, but would do so if asked or directed to do so. Section D, i., referenced that students who watch course-related video material tend to consume information faster (Graham, et al., 2017) and have better performance in exams (Dupuis, et al., 2013). Therefore, knowing that *there is a willingness for business undergraduates to indeed watch videos presented by their tutors* is good to keep in

mind from a teaching perspective. However, the extent to which they are engaged in said videos, are being looked at here.

When it comes to locating these videos, 5 of the participants share that their seminar leaders usually send them links to videos to watch before-hand, which are almost always links to YouTube videos. Participant 1 stated that, if they were presented with an assessment, they would go straight to YouTube to wash a 5-10 minute long video on the topic at hand. In contrast, participant 2 shared that they would only resort to searching for a video (on YouTube) if a simple Google search did not suffice in explaining a topic or concept. These answers coincide with the survey findings, which revealed that the biggest portion of respondents watch the videos that their university instructors tell them to.

Moving on, it is relevant to find out in what form these video links are provided to students. To this end, the participants who answered, said that the video links are either found on their Blackboard or within their lecture slides. Additionally, two other participants said that they were presented videos through the Ryze app, however, still preferred YouTube. When asked why, one respondent shared that YouTube provides concise videos on a learning topic. Based on the fact that the videos presented on the Ryze app were not all **'short and concise,'** this participant described the app as 'ineffective' for their own learning. Despite this insight and the rise of information-rich short videos (section 2C, Song, 2021), it is becoming clearer that the preference of short videos may not be tied to strong engagement levels. This is because the two

specialised videos ranking the highest for engagement in the previous section were in fact, the longest videos of the bunch. With that said, the shortest video (Animated Explainer), came up as third in terms of entertainment. This leads us into the direction that while short videos have not proven to be the most engaging, they still do rank quite high in entertainment.

Consequently, the following set of questions centres on which video platforms students utilise and the decisions leading up to such preferences. To begin, the discussion made a start by asking the group to identify if each of them are video, audio, text or mixed learners. Notably, all six of the participants stated that they are visual learners, with a preference for video. Three of the participants flagged that in order for these videos to meet their learning needs, they would need to involve animations or diagrams. Consequently, participant 1 shared that a person speaking to the camera does not constitute visual learning and should be considered audio. This outlook, which suggests that a speaker is of low interest to student viewers, does not come as a surprise, given that in the participation touchpoint, 'I want to hear more from the speaker in this video' ranked the lowest amongst all 4 videos studied in the survey. The focus group discussion continues to prove that students care less about video 'hosts' and more about mixed media and visual intrigue. Additionally, when discussing if there is any importance in text being included in their preferred video learning media, participants highlighted that they look for closed captions in their learning videos. One participant stated that it provides 'comfort'.

Moving on, all six participants agreed that YouTube is their most preferred platform for watching YouTube videos. What is particularly significant is that none of the participants made references to MOOC platforms when considering their top preference. When asked if there is any particular reason for the absence of MOOCs in the discussion, one participant stated that she tried FutureLearn and found that they had to spend more time going over the content due to the 'talking heads' style of videos translating as audio learning to this participant, who is a visual learner. FutureLearn is known to use video learning as a supportive tool for its text and written assessment style learning (Section d.11.). This might play a role in why FutureLearn is not more sought after by visual learners.

Now that a consensus has been established surrounding platform preference, it is essential to understand which platforms students are encouraged to use. Thus, participants were asked which platform their professors usually recommend. This is vital because students have mentioned on various occasions, particularly in the survey, that they tune into the videos which their tutors share with them. Accordingly, four out of the six participants stated that YouTube is most recommended by their teachers. This was followed by BlackBoard for multiple reasons stated below:

- Blackboard is where students find the video links to YouTube
- Blackboard is where professors often upload recorded lectures
- Blackboard is an official university platform and therefore, frequently utilised by academic staff
- Blackboard is familiar to students and staff

This portion of the focus group is interesting because while none of the focus group participants identified Coursera, the survey revealed that Coursera was the second most utilised platform by students when it comes to course related videos. Blackboard ranked third in this portion. Similarly, when survey respondents pointed out the top platforms recommended by their teachers, Coursera ranked second once again. These varied results may be due to a particular Coursera course which is being promoted by the Norwich Business School perhaps or possibly that students in this focus group did not engage with any tutors who promoted Coursera. Regardless, it can be said that Coursera seems to be, to an extent, used by students for video learning.

These topics of platform comparison raised the subject of credibility during the focus group. All six participants stated that they are not concerned about credibility when it comes to YouTube because they do not use YouTube as a ‘source’. Rather, participants shared that they use YouTube simply to understand or further comprehend concepts. Furthermore, students do not worry about the credibility of learning videos on YouTube because they will not use them as citations for their coursework. Thus, credibility of video content on YouTube, or generally on non-academic video platforms does not seem to alarm the students. In fact, participant 5 said, “ I'm just using it to give myself some knowledge. And like, I think it would be pretty clear if it was a joke or something completely different”. Likewise, participant 4 agreed by saying, “Depending on subscribers and comments and stuff like that, you can easily identify if it's credible or not”. This suggests that students feel confident in their inability to be deceived by course-related media which might be inaccurate or wholly uncredible.

On the same topic, 3 other participants added that they are able to identify whether a video is credible or not by assessing the subscriber count, video views and comment section. This is relevant because in regards to the videos being studied in this paper, one of their primary differentiator points is that they are credible due to their academic backing from university professors. However, this point of discussion raised that credibility of learning videos when it comes to increasing knowledge and understanding is not top priority for undergraduate learners. Participants cited the following as ways to identify whether a video is trustworthy or not - these include quotes with the key markers in bold:

- “depending on **subscribers** and **comments** and stuff like that, you can easily identify if it's credible or not” (participant 4)
- “I look at **numbers**, **subscribers**, and **how many views** especially. So how many people have watched this video? And their comments” (participant 6)
- “I will look at the **videos** and **comments** and **subscriptions** to select which video should I watch. And mostly, the videos are recommended by the **lecturers**, so I trust them, because they already watched a video before us” (participant 3)
- “Usually **comment sections** will like clarify, like (if there has been) a mistake or anything” (participant 2)
- “you can see how engaging has been sometimes the person has also replied to the queries on the **comments**” (participant 6, in reference to the video host being active in the comments section)

The above quotes signify that students uphold a lot of value regarding a video's academic accuracy in the combination of video interactions, or one might say, the popularity of the video. However, the most consistent marker mentioned is the comments. YouTube comments tend to be related to the nature of the video and often are queries relating to the content. These might act as a form of 'consumer reviews' for students. According to a 2020 study from *the Journal of Marketing*, consumers place great importance on consumer reviews and view them as, "informative, entertaining, credible and valuable" (p. 193). Comparably, YouTube comments might be the closest substitute for reviews for video viewers.

Now that we've identified how frequently BlackBoard and YouTube are used, as well as the role of video hosts and comments in videos, it is relevant to check whether online video learning has increased since the start of COVID-19. For this, the participants who were around pre-pandemic regarded that despite the online shift, online videos from lecturers did not increase. However, there was an increase in recorded lectures being uploaded to Blackboard. According to the discussion, this placed a strain on students, as the abundance of material became overwhelming. This sheds light on the fact that even if particular videos are later revealed to be engaging, providing students with many videos at once may produce negative feelings which may negate any engagement potential.

Session 2 / Hobby related videos / Platform preferences

The first portion of session one focused on video preferences relating to students' course of study. To compare preferences and develop a deeper understanding

surrounding media choice, participants about their video platform preferences when it comes to hobby-building. This will help identify whether video learning preferences are based on general platform interest or other factors. The following were the results:

- Participant 1: Netflix, YouTube and TikTok
- Participant 3: Tiktok and YouTube
- Participant 4: TikTok and YouTube
- Participant 2: YouTube
- Participant 3: TikTok
- Participant 4: YouTube

Ultimately, TikTok seemed to be the primary choice for hobby learning. In section 2C, various studies revealed that Tiktok promotes student motivation, creates an engaging learning environment and promotes skill development (Escamilla-Fajardo et al, 2021). Despite YouTube being around for far longer, it has not garnered any similar results from its educational videos. This might be due to the varying formats and lengths of YouTube videos. Whereas, Tiktoks tend to stick to a somewhat consistent length.

So, what are students' attention spans like? Discussion on this subject revealed a consensus surrounding a sense of decreased tolerance for long videos. Multiple students also agreed that 20 minutes is their maximum focus period for videos in the post-covid era. Accordingly, an important topic was raised here regarding separation between university learning and home life which involves hobby building. Participant 4 shared that it is important to use different video platforms for their hobbies versus their studies because it helps in creating a boundary between the professional world and

leisure. Based on this, participants also flagged that the separation between university learning and home-life was severely impacted due to home-learning during the pandemic. Therefore, while YouTube was always a platform used for both study related matters and university, TikTok emerged in a time when students were able to utilise a new platform solely for their hobbies, leisure and non-academic entertainment.

Moreover, to garner an impression on whether students would like to have TikTok style videos for their university studies, the answer was no. Participant 3 said, “the layout of TikTok is also different from the YouTube videos and I find it's quite difficult for me to learn with the layout”. Similarly, participant 2 mentioned that it does not suit university learning, saying “a few seconds of the clip is not really helpful”. This is a valuable insight because it points out that while studies referenced in section 2C find that TikTok videos are highly beneficial for learning due to creativity and style, for this group of students, TikTok videos are too short.

Adding to the discussion, TikTok was referenced alongside very similar wordings (highlighted in bold):

- “I feel like that would be another aspect of my life where education and **home-life** with kind of merge together. And I kinda like the fact that the TikTok’s just kind of more for **leisure**” (participant 1)
- “I would definitely not use tick tock for like unique educational purposes. It's more of like an **escape** and form of **relaxation** to like, take your **mind off**”

Again, words like leisure, home-life, relaxation and escape all suggest that TikTok has become somewhat a safe haven for undergraduates, where they can 'switch-off' from their university obligations. Ultimately, it is also established that short videos **(under 20 minutes - most likely from YouTube)** are most preferred, however not as short as 15-20 seconds (TikTok length).

Session 3 / Case study videos / engagement levels

The final section of the focus group centres on the videos being reviewed in this study. While the survey helped establish a rough idea of the engagement levels between the varying styles of specialised video, this section of the focus group dives deeper into the reasoning behind the additional touchpoints introduced during this project. These include production value, learning and entertainment levels. Thus, students were presented with each of the four videos, consecutively, to watch. After watching each video, each participant was requested to answer a set of the same three questions privately and email it to the researcher.

Due to strong tendencies for GroupThink during focus groups, this session is most suited for individual feedback. GroupThink (also known as Bandwagon Effect), is defined as instances in which people share more extreme views in a group than they would express individually due to social desirability pressures (Hollander, 2004). In fact, various studies including 'The validity and reliability of focus groups as a research method in adult education' from the *Journal of Lifelong Learning*, have questioned the validity of focus groups due to Groupthink and conformity concerns (Chioncel, 2003).

Therefore, in order to accurately assess the findings of the specialised video engagement preferences revealed in the survey, the focus group questions play a role in deriving some potential qualitative reasoning behind the survey results. Since it would be difficult to dive into qualitative data surrounding the engagement levels identified from the survey, looking at the additional touchpoints is a good way to compare between engagement level results and non-OSE model related outcomes. The three questions presented are the following:

1. What are your thoughts on this video's production value? (quality of video and editing?)
2. What about its usefulness for learning?
3. Would you say this video is entertaining? (why or why not?)

The videos were presented to the participants, with each of the video including a short definition of the video style they are about to watch. For instance, the first video presented was the 'Animated Explainer', so, prior to playing the video, they were given the following statement for context; "Animated explainers centre on an expert description of a concept, but uses animation in addition to video to facilitate understanding".

Moving onward, the first video (animated explainer) was **one minute** long, simple animation alongside a talking head style which defines the business concept, simple structure. This video ranked highest for ease of learning and lowest for production value

in the survey. Upon investigating these touchpoints in the focus group, students mentioned that the video used simple yet effective animations with clear and easy language. It was also said that the length of the video was ‘just right’. Overall, it seems that the short length of the video and basic use of animation was found very beneficial for learning value, however not impressive enough to warrant it as having ‘high production value’. Despite not having ground-breaking quality according to the students, there was nothing but praise for this video style. Thus, we can infer that production value is not incredibly important to students as much as entertainment and learning usefulness.

Next video is the Short Explainer. This video, just under two minutes, uses a talking head style alongside stock footage and soft background music to explain the business concept of socialisation. The survey told us that production value was highest in votes and lowest in entertainment. This video attained dissident feedback in comparison to video 1. Here, participants all shared that this video was distracting and hard to follow due to the variety of clips, media and music. This feedback is consistent with the survey results as the entertainment and learning metrics are indeed lower however production value was high as participants flagged the effort evidently placed into editing and producing such a video. Participant 6 described the video as “Entertaining but not in academic context”. While all 6 participants stated the words ‘distracted’ or ‘distracting’, more than 2 mentioned that the background music was also too loud. However, there was no mention of the length of the video. Ultimately, this video discussion signals that mixed media and a variety of visuals can be entertaining, however not in the context of academia.

In the context of learning videos, an increasingly visually stimulating video seems to backfire.

Consequently, the third video is the Academic Case Study. This is a 5.5-minute-long video which was filmed in the L'Oreal office, aimed to capture real industry insight on the subject of Communication - from practitioners' perspectives. Looking back at the questionnaire, the case study was considered highest for its usefulness for learning and lowest for production value. This video style was also viewed as highest for both learning and entertainment metrics as well as being a very close second for the most engaging specialised video based on the OSE model. When students expressed their views in the focus group, they shared that not only is the video entertaining and informative, it is also memorable, which means that it can be used as an example by students throughout their studies and assignments. Participant 6 described the video as "Very entertaining and engaging, visually appealing". There was no negative feedback for this video and more than 3 of the participants mentioned how well the video quality and production is. Therefore, it is surprising that the case-study ranked lowest for the production metric. Despite this, it can be argued that all metrics were very high here and production value was simply the lowest of the three, however not necessarily compromised. Participant 5 even stated that the video felt "motivating and inspiring". It was also established that production value is not as important to students as learning and entertainment. Therefore, it is consistent to see that with production coming in last, the video received positive feedback. Regardless of the praise, video 3 did not strike number one in terms of video engagement.

The final video assessed is video 4, the Academic Feature. This 5:35 minute long video revolves around the topic of entrepreneurship, using voice over, animation, stock footage, quotes, interviews and more. Essentially, this style of video combines all sorts of media in a story-telling manner. The survey displayed that this video was graded highest for entertainment and lowest for production value. It was also scored as the most engaging video based on the reviewed OSE model for videos. So, what is behind these classifications? This video was praised by the focus group participants for aspects including clear voice, great story-telling, useful figures and "not too long and too short". Participant one said, "Unlike video 2, the use of clips was not overwhelming. This may be due to the music being calmer and the voice being clearer and louder". Thus, the use of varied mixed media, when used correctly, can be viewed as highly entertaining instead of distracting. Again, the longer length of the video did not seem to be an issue for the students. However, what did raise mixed opinions was the music. While two students said that the music was calm and 'nice', two others described the music as 'distracting' and 'too loud'. Therefore, this may have played a role in the lower ranking for production value. This also signifies the importance placed by students on audio and general noise pollution in learning-based videos. Additionally, users were very happy with the availability of closed captions.

5. CONCLUSIONS AND RECOMMENDATIONS

This study set out to uncover the engagement extent of specialised videos for students in the business school using the Online Student Engagement model, altered for video. By doing so, the research introduced three additional factor considerations; production, learning and entertainment. These factors were added based on their prominent mentions in literature related to video assessment and video engagement.

Once both the engagement levels from the questionnaire as well as the in-depth review of the additional metrics have been looked at, a prominent insight can be drawn. While a video such as the case study can be so well received for its usefulness of learning and ease of information absorption as number 1, with the help of entertainment, it does not render itself as engaging as the video which is primarily seen as entertaining, followed by useful for learning (video 4). The Academic Feature was revealed to be the most engaging specialised video based on the OSE model because it was not only easy to understand, but also because it was firstly entertaining without distraction. Additionally, it is deduced that the length of learning videos is not as vital of a matter as entertainment and learning usefulness combined. The most engaging video revealed in this project was also the most entertaining, followed by the most learning efficient, and lastly high in production value.

With that said, despite the Case Study and Academic Feature being the most well received on the basis of the Online Student Engagement model and for the additional metrics introduced in this study as well, the idea of a ‘short explainer’ seems the most

useful for learning for participants. Similarly, participants found the idea of a ‘case-study’ as most entertaining. However, in practice, it was the Academic Feature (the longest video presented) that is most engaging. Additionally, it is the Case Study (second longest video), which was second most engaging - and both were top contenders for the touchpoints of learning and entertainment. Additional factors flagged as important to consider throughout this focus group are, story-telling, noise pollution, correct/reasonable use of mixed media, closed captions/subtitles and the pace of narration/speaker.

Ultimately, results from primary research, which assessed 4 types of specialised video, revealed highest engagement response towards the longest video of the four, the academic feature - and the lowest engagement towards the Animated Explainer, the shortest video presented. Despite these results, it is imperative to mention that the differences in engagement results of the OSE scale are very close together. This suggests that business students’ priority touchpoints for engagement are extremely varied and that this model can be revised to consider additional factors. Overall, despite the focus group shining light on ‘short and concise’ videos and the importance of information rich short videos, the OSE model along with the additional three factors suggest that while short videos may be an initial preference to students, engagement is more so linked to entertainment, story-telling, learning potential, audio appropriateness and relatability.

A. Final Conclusions

By diving into various layers of primary research involving students who are expressing their preferences in the world of business academia, there is understandably plenty to consider. Below are five final takeaways from this project.

1. Short videos are entertaining but long specialised videos are engaging

While on several occasions, participants flagged that shorter videos are their preference for higher entertainment and learning retention, it is the longer videos such as academic feature and case study which were more engaging and indeed had high views in terms of learning and entertainment too. Based on this case study which is geared to business school students, **longer videos** with elements including clear audio, no sound pollution, invisible narrator/speaker, moderate mixed media, a story-line and a moderate level of relatability are more engaging than **shorter videos** with less mixed media, a talking head or visible narrator, no story-line, high production value, and a low level of relatability. The shorter style of videos seemed to be a conscious pick by students in earlier discussions, however after watching all categories of videos, there was more engagement, interest and feedback on the longer specialised videos. However, participants agreed that a course related video should never be longer than 20 minutes. Ultimately, the most significant insight to highlight is that the additionally introduced factor of entertainment in this study was the most correlated with high levels of engagement. The more engaging a video was, the more it was scored for entertainment. In this case, the Academic Feature was both most engaging and most entertaining based on the results.

2. Production value is not highly considered for learning

Several of the videos assessed which ranked highly for learning were considered to have ‘low-production value’ by respondents. For instance, while the ‘Animated Explainer’ ranked highest for learning, its production value was deemed quite low. On the other hand, the other remaining factor, entertainment, was actively discussed during the focus group and showed a greater correlation to high learning and high engagement. In fact, several students shared that it is often the case that higher production value reveals more mixed media and music, which are highly distracting for their learning development through video media. Key terms mentioned include distraction, noisy, loud and ‘too much’ during feedback on videos ranked higher in ‘production value’.

3. Students care little about video ‘hosts’

Regardless of whether the video host or narrator is a professor or practitioner, interest in ‘hearing more’ from the video speaker ranked as the lowest engagement touchpoint in the OSE study. Similarly, and apart from the touchpoints and factors, when the speaker was discussed in the focus group, it was only when participants shared thoughts on their speech and pace clarity. However, despite the low emphasis on video hosts in engagement metrics mentioned in the previous point, there was a significantly higher interest in videos involving an industry expert rather than university based academic personnel.

4. Students desire relatability

Both videos identified for highest engagement, held a high sense of self familiarity and relatability. As identified by the OSE model, the 'emotional' touch point of the scale is highly important and follows a series of questions to determine the extent in which a viewer found a material relatable. Questions surrounding ethics, sense of self, desire to apply to life and more are components to which this touchpoint prioritises relatability. To exemplify, for highest engagement video, the Academic Feature, respondents experienced the most elevated levels of emotional response compared to the rest.

One reason may be attributed to the topic of 'entrepreneurship' being both one which is closely tied to Business school students and one in which many students can visualise themselves in. The second most emotive video was also the second most engaging video which is the Case Study. In this case, presenting students with a storyline which involves distinguished experts in an organisation like L'Oreal may also have played a role in the high emotional rates due to potential desires by Business students to work in similar organisations.

5. Credibility is not highly sought after

One of the quickest consensus reached during this study was the fact that NBS students are not concerned about the credibility of the learning-related videos they watch. This is because they use videos to learn and understand concepts, topics and ideas rather than for citations used for coursework. Students view that it is straightforward to identify if a video is misleading or completely off the mark based on comments, likes, subscribers and interactions. Therefore, while specialised videos are

highly credible due to their academic achieved backing and production, this differentiating factor does not play a role in video preference or engagement.

6. Hobby and Higher Education video styles should stay separate

Throughout the study, there have been various references to social media's prominent influence on video trends and educational content. While this is indeed the case as mentioned in section 2C, this study reveals an opposing insight. All students cited either YouTube, TikTok or both as their primary sources of hobby building and leisure related videos. However, when presented with the idea of TikTok style videos and TikTok itself being used as a source of course-related educational videos (not hobby/school related), this was met with complete rejection. All participants shared in various wordings that TikTok is a safe-haven of some sort in which they can use as an 'escape' and a source of 'relaxation' away from the higher education world. It was also discovered the short 15-20 second format would regardless, not be suitable for learning retention.

7. YouTube remains the highest contender

Many forms of platforms and video hubs were discussed, assessed and presented throughout this paper. The likes of Coursera, Skillshare, Lynda, TikTok and more. However, through both forms of primary research outcomes, it is clear that YouTube is the ultimate go-to space for course related videos by students. Unless Business students are explicitly instructed to watch videos uploaded directly to BlackBoard or elsewhere, students almost always take it upon themselves to search for videos on YouTube. This is important because it suggests that platforms which present specialised videos such as the Ryze app, discussed in this study, would benefit from

sourcing their in-app videos from YouTube. This could result in higher media traffic, more engagement with the video and further app recognition and awareness.

Recommendations for Video-Based Media Specialists

i. Recommendation List

Based on the conclusions derived above, there are various learning outcomes which can be taken into consideration by both video media specialists and educators seeking to provide engaging videos for Business school students.

1. Videos should be long enough to inform and created well enough to entertain

As established, longer videos made with the right ingredients result in positive engagement. To achieve this, based on the above case study, a video can follow the following elements:

- Less than 20 minutes long
- Clear audio
- No intrusive or loud music
- Story line or cohesive dialogue
- Moderate amount of mixed media
- Invisible narrator
- Relatable examples

2. Strive to have industry experts as video 'hosts' or speakers

Specialised videos garner more engagement when the speaker or video guest works in industry and can speak to students from a standpoint they may look up to. This is exemplified by the L'Oreal case study presented in the research stage.

3. Present videos students can relate to

Business students are more likely to engage with video media that either mimic their current life, studies and interests or visualise a future that might be appealing or desirable given the field of study. Presenting business concepts recorded from a Zoom lecture may not evoke the same engagement results as a video filmed at the Google HQ in London or one describing an Academic Feature discussing a self made student's journey to becoming a successful entrepreneur.

4. Use simple language

Learning videos are mostly used for comprehension and instruction. The video does not need to be complex and wordy nor is it considered an academic journal to be used for assessments. Media specialists and educators can consider that a specialised engaging educational video should be easy to understand and approachable.

5. Adaptable rather than trendy

While it may be tempting for media specialists to get caught up in the social media video trends and attempt to translate those into academic videos to grab student attention, student input has shown that this is not demanded. Videos that are adaptable to new technologies such as 360 cameras and innovative technology is an effective way to be adaptable to new video technologies however, mimicking TikTok trends and the platform as a whole will not achieve positive engagement.

6. Utilise a user friendly and easily accessible platform

Students gravitate to YouTube for its ease of use, accessibility, popularity and the variety of choice. It's free to use and they are aware that links can be swiftly shared to

friends or classmates in order to exchange ideas. While platform use has not shown any relation to online student engagement particularly, using an accessible (and free) platform to share videos to students may help in providing easy to share and quickly to find media.

ii. Recommended Online Student Engagement Model for Educational Videos

This portion of the paper presents a revised model which may be used by media experts and digital education researchers hoping to gain a deeper understanding surrounding the engagement levels of educational video media. This new model builds on the previous Online Student Engagement model founded and improved by Dixson in 2015 and utilised in this project. While the original version was altered in terms of wording to apply to online video for this study, this revised version applies the two additional factors introduced in this paper; entertainment value and learning usefulness. The addition of learning usefulness aims to gauge the feeling of learning fulfilment by students rather than assessing the actions taken by students after watching the videos, which is what the other factors focus on. Additionally, the second proposed factor of entertainment is valuable due to its newly founded correlation to high engagement educational media. Therefore, this section of the paper suggests that this updated model can help provide a closer idea into what level of engagement a video has evoked from both an action based approach as well as a non-observable feeling based approach. These two added touchpoints are non-observable in a fashion similar to the 'emotion' touchpoint already present in the original model below:

Table 2

Item Distribution Across Factors

Skills	Emotion	Participation	Performance
Study regularly	Put forth effort	Have fun in online chats	Do well on tests
Stay up on reading	Find ways to make materials relevant	Participate actively in forums	Get good grades
Look over class notes	Apply to my life	Help fellow students	
Be organized	Find ways to make material interesting	Engage in online conversations	
Listen/read carefully	Really desire to learn	Post regularly in forum	
Take good notes over readings, PPT, video lectures		Get to know other students	

Figure 41: Original OSE model (Dixson, 2015)

Measuring Student Engagement in the Online Course: The Online Student Engagement Scale (OSE)

Appendix A
Online Student Engagement Scale (OSE)

Within that course, how well do the following behaviors, thoughts, and feelings describe you? Please answer using the following scale:

1. not at all characteristic of me
2. not really characteristic of me
3. moderately characteristic of me
4. characteristic of me
5. very characteristic of me

1. Making sure to study on a regular basis
2. Putting forth effort
3. Staying up on the readings
4. Looking over class notes between getting online to make sure I understand the material
5. Being organized
6. Taking good notes over readings, PowerPoints, or video lectures
7. Listening/reading carefully
8. Finding ways to make the course material relevant to my life
9. Applying course material to my life
10. Finding ways to make the course interesting to me
11. Really desiring to learn the material
12. Having fun in online chats, discussions or via email with the instructor or other students
13. Participating actively in small-group discussion forums
14. Helping fellow students
15. Getting a good grade
16. Doing well on the tests/quizzes
17. Engaging in conversations online (chat, discussions, email)
18. Posting in the discussion forum regularly
19. Getting to know other students in the class

Figure 42: *OSE Original Questionnaire sheet* (Dixson, 2015).

OSE Model: Amended for this research (primary research stage)			
Skills	Emotion	Participation	Performance
I would re-watch this video if I need to revise/remember facts	*I thought of ways to make this material relevant to my life*	*I would watch more videos like this throughout the week for my studies*	*I would use videos like this to help me get a good grade*
I would do follow-up readings on this topic for my course	*I will apply these topics to my life*	*I watched the entire video*	*I would you be confident that I can do well in a quiz on this video topic*
I took notes/would take notes if this were for my module	*I thought of ways that this topic relates to me*	*I would be interested in participating in online chats, discussions with the instructor or other students regarding videos like this*	*I would be interested in emailing my instructor questions related to this video*
I listened to this video more carefully than I usually do	*I desire to learn the material through videos like this*	*This video would inspire me to take part actively in small-group discussion forums*	
	I can critically think about my own ethics, priorities, beliefs and values in the context of this video	*I would be able to help explain this topic to other students after watching this video*	
		I want to hear more from the speaker in this video	

Figure 43: Amended for this research (primary research stage)

OSE Model: REVISED for future media specialists and researchers					
Skills	Emotion	Participation	Performance	**Learning**	**Entertainment**
I would re-watch this video if I need to revise/remember facts	*I thought of ways to make this material relevant to my life*	*I would watch more videos like this throughout the week for my studies*	*I would use videos like this to help me get a good grade*	I find this video easy to understand	I am entertained by this video
I would do follow-up readings on this topic for my course	*I will apply these topics to my life*	*I watched the entire video*	*I would you be confident that I can do well in a quiz on this video topic*	I find this video informative	I find this video is amusing
I took notes/would take notes if this were for my module	*I thought of ways that this topic relates to me*	*I would be interested in participating in online chats, discussions with the instructor or other students regarding videos like this*	*I would be interested in emailing my instructor questions related to this video*	I think this video is improving my learning on the topic	I want to watch more learning videos like this one
I listened to this video more carefully than I usually do	*I desire to learn the material through videos like this*	*This video would inspire me to take part actively in small-group discussion forums*		I find the content of this video clear	I would share this video with a friend

	I can critically think about my own ethics, priorities, beliefs and values in the context of this video	*I would be able to help explain this topic to other students after watching this video*		I think that there is little to no visual distractions	
		I want to hear more from the speaker in this video			

Figure 44: Final revised recommendation model for researchers and media experts

6. Research Constraints

With all research, comes drawbacks, hurdles, learning outcomes, and key considerations. This segment of the paper outlines the key points to be aware of regarding the research journey and outcomes:

1. Participants

One of the first barriers faced during the research was both finding respondents for the survey as well as participant gathering for the focus group. The survey was distributed to students via university forum groups on social media and via Business school newsletters. Despite the online survey advertising on UEA pages and administrative email alerts regarding the survey, there were very few responses due to the timing. The survey was launched during the first summer month, just shortly after the final exams

took place for UEA students. As a result, despite the incentives outlined, it was very difficult to receive survey activity as students were either not checking their university related social media or were busy after leaving the university community and heading home. Since the focus group participant gathering was linked to the survey form in which users must leave their email address, the focus group was also put on hold.

Eventually, when enough expressions of interest in the focus group were gathered from students who met the criteria, they were all contacted and booked in for the focus group. The focus group had 6 participants scheduled for a face to face focus group on July 7th, 2020. However, only 3 participants showed up. In order to make use of the situation, a mock focus group was run and the three participants received their promised gift-cards and lunch. Despite this disappointing event, after consulting with supervisors and mentors, it was decided that the focus group will be rescheduled to take place during term time when students are more proactive and will take place online in order to help reduce the chance of no-shows. Ultimately the focus group took place on January 12th on Microsoft Teams and all of the 6 re-recruited participants took part. In fact, there were additional students placed on the waitlist for the focus group and on standby that morning in case of no shows. While this hindered the research timeline and organisation of the project, it did not affect the overall piece of work. The delays in primary research collection allowed the researcher to develop skills in other areas such as gather further insight on citation skills and expand on the literature review.

2. Multidisciplinary

This project is multi-disciplinary due to the multi-faceted nature of educational video media. This area joins forces with research mainly from media, education and Psychology literature in order to have a well-rounded understanding of what engagement stands for in the context of digital video usage in higher education. Additionally, the project also draws on insight from Business journals due to the Business studies case study focused on in this project. While this is not a constraint, it is a vital point of consideration when discussing this piece of work and replicating it across other specialised video research on engagement. The project combines the primary elements of video media technologies and studies, supported by insight on use of media in education, Business school practices and the Psychology of student engagement.

3. Niche sample

This project follows the results of student engagement assessments on the niche target group which is undergraduate students studying Business courses at the Norwich Business School, University of East Anglia in Norwich. Due to limited access to Business school students across various universities, the research covered the sample from a singular university in which UG NBS student access was attainable. One must consider that the sample also varied in regards to which year of study they were a part of at the time of the survey and focus-group. Thus, the results are unique to the engagement levels experienced by a group of students studying in the same city, in the same school and under similar teaching experiences. Additionally, while some students partaking in the research collection might have known each other as a result of studying

in the same school, there were no reports of students expressing that they know one another or if the questions in the survey or focus group were shared amongst each other prior to taking part in either forms of the primary research.

4. Digital Fatigue

During the previous years of immense lockdown, online education, digital increase and the like due to COVID-19, a multiplicity of research centres have reported high levels of digital fatigue amongst millennials and Generation Z. According to Deloitte, 32% of consumers in 2021 have felt overwhelmed by the high digital usage, tech devices and online subscriptions (Auxier and Silverglate, 2021). Similarly, Ernst & Young Global, published a report which shared that this reported digital exhaustion “drives 47% to seek downtime from internet-enabled devices,” (Kiely, 2021). This suggests that while digital video media continues to be on the rise, interventions such as the global COVID-19 may have lowered the motivation and interest for students to enthusiastically seek or engage with course-related videos. Thus, this may have reflected in the results outlined in this project, however it is difficult to validate such considerations.

6. Further Research

This research played the role of assessing specialised videos using a peer-reviewed online engagement model and applying it to video media. The video media output is directly focused on Business subjects and assessed on undergraduates studying Business. Various insights were uncovered such as video length matters, the importance of entertainment value, the elements which make up an engaging specialised educational video, distraction concerns and much more. While eye opening, this study is also niche to the subject area and styles of video media presented to a close-knit sample. Therefore, there are plenty of opportunities to build on this project and to expand it to new lengths.

1. Utilising the revised model across various Business schools

The revised OSE model (section 5B) which incorporates learning and entertainment as additional touchpoints, can be harnessed by media researchers to replicate this study across various Business school universities across the UK. Researchers with access to various institutions will have the opportunity to test the assertions put forth in this study when applied to various groups of students in different learning environments.

2. Utilising the revised model across various subject areas

Likewise, media and video media specialists are likely to benefit from assessing specialised or non-specialised videos using the revised model across a number of subject areas from the same university. For instance, groups of course related videos in various subjects can be presented simultaneously under similar conditions and time, to assess

the engagement extent of such videos in comparison to different subject types. It may be the case that students engage with videos differently depending on what field of study they are a member of. To exemplify, undergraduates undergoing a Pharmacy degree may engage with instructional and practical demonstration videos more dominantly rather than a Business student would with the same content. In fact, based on this study, it may be that a Business student's engagement results would favour videos like Case Studies which demonstrate an industry professional discussing organisational matters. Regardless, bringing forth this research approach into other subject areas could help open doors to new findings in Media Studies.

3. COVID

The launching point of this study as well as the primary research stage began amidst COVID-19 and strict lockdowns in the UK. Today, restrictions have lifted across the country and domestic travel as well as international travel. Conducting a digital and online media related study can differ based on what kind of circumstances are taking place. Therefore, while this study took place during a time of high digital usage and potential digital fatigue, it is worth considering that this study or a similar version can be re-created in the coming year(s) now that university teaching has, for the most part, returned to face-to-face environments. Ultimately, this could also act as a comparative study on engagement during and after the pandemic and provide space to begin to understand if online student engagement for learning videos has increased or reduced since the end of online teaching.

4. Measuring engagement using the same topics but across different categories

Finally, further research can be useful to this field of study if applied to a series of learning videos which all discuss the same subject matter. To clarify, if this research can be replicated, however the videos presented, can be substituted with ones discussing the same topic (such as Organisational Behaviour), across multiple categories (case study, academic feature, explainer, animation, etc). Doing so will enable researchers to conduct a consistent comparison of video media categories preference amongst students. In this case, there was no availability of consistent topics under different video styles. However, in the future this possibility is available to others subject to media convenience. Additionally, this proposition does not necessarily need to cover engagement, if the revised OSE model is not used, but can then cover general students' first-hand preference towards video styles in educational media. Correspondingly, the revised OSE model can be used simultaneously in this sense to compare between student preference and student engagement output for specialised videos in higher education courses. Overall, this study does not aim to conclude the discussion of student engagement with specialised videos in higher education, but rather, provide enough insight and input to spark research on this niche subject further.

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6. Appendices

a. Focus Group

i. Focus Group Protocol

Online focus group protocol

Ryze Student Research

Meeting Data	**Participant Data**
Date: Jan 12	No. of Participants Scheduled: 6
Start Time: 12:00pm	No. of Participants Attended: 6
End Time: 2:00pm	Job Classification/Length of Service: 2 hrs
Meeting Location: Online (MS Teams)	Incentive: £10 amazon gift cards

Goals and Objectives

Identify student views on video education:

- Find out about general involvement with video learning platforms
- Understand motivators for using particular platforms
- Discover video platforms used for hobbies (if any)
- Scope out interest in course

-

- Gauge which video style is found to be most interesting (and why)
- Gauge which video style is considered most useful for learning (and why)
- Find out which video style is voted as most entertaining (and why)

Researchers

Moderator: Lina Elkadi
Co-moderators and note-takers: N/A

Subject Recruitment Criteria

- UEA students
- Undergraduate
- Various years of study (1st, second or third year)

Session Style:

Session 1:

- 40 minutes
- All participants together online
- Discussion surrounding video platforms

Session 2:

- 50 minutes
- Discussion surrounding Studious videos
- Students will watch the videos on my shared screen

Paperwork

- Consent form

Equipment

- Note-taking equipment of your choosing

ii. Focus Group Discussion

Focus Group Discussion

Ryze Student Research

Introduction

Good morning everyone, I am Lina Elkadi. I am a PGR student at UEA, conducting an MA by Research in Media. I will be the focus group moderator today and walk you through the session.

The purpose of this focus group is to gain an understanding of your views regarding video education, usage of video learning platforms and thoughts on different styles of videos created by Studious Digital Education (a new social enterprise that aims to create digital content for the higher education sector).

The focus group will be split into two sessions. The first session will be 40 minutes of group discussion and answering questions. The second session will be 50 minutes where you will watch four videos and answer individually and email back to the moderator then discuss.

Introduction Part 2: Confidentiality

Your comments and opinions will be strictly confidential. I will record this focus group and take notes so that I can be sure we are reporting your opinions accurately.

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified or identifiable in any reports or publications. The only identifiable information will be the name of the institution you belong to (UEA) and the year of study. Any data collected about you in the online questionnaire stored securely with password protection.

Data will be securely destroyed one month after the official end date of the project, which is 30/10/2022.

This focus group style is informal so feel free to speak as you would normally and be as comfortable as you like.

Do you have any questions?

Roundtable Introductions

Since we will be together for an hour or so, it will make it easier for all of us if we get acquainted a little better. I'd like to ask each of you to give us your first name and your course and your year of study.
I will call out each person to indicate that it is your turn.

Begin Focus Group Questions

Session 1

[Warm up questions]

- Do you watch videos related to your studies/course? How often?
- Are these videos something you find yourself or is it suggested by your teachers?
- How do you find these videos?

[Platforms]

- Which video-based platforms do you use to watch these videos?
- Are you a video, audio, text or mixed learner?
- Text first? Where do you find your text?

- What is your most preferred platform for watching learning videos? (and why?)

- Which platform is most recommended to you by your instructors?
- Why do you think that is?
- Have instructors increased online video resources since COVID?
- Would you say you are a self learner?

[Hobbies]

- What are some hobbies or skills you guys have outside of your course?

- For personal skills or hobbies, do you use any video learning platforms?

- Which platforms do you go to for your hobby/skills related learning? (and why)

- Would you use this same platform for your university learning? (why or why not?)

End of Session

Session 2

I will now share my screen and play four videos in total. In between each video, we will stop to discuss and answer some questions.

All videos are related to Business subjects and topics.

Video 1: Animated explainer
Animated explainers centre on an expert description of a concept, but uses animation in addition to video to facilitate understanding.

play video

What are your thoughts on this video's production value? (quality of video and editing?)

What about its usefulness for learning?

Would you say this video is entertaining? (why or why not?)

Video 2: Short Explainer
Case studies aim to capture real insight into companies, practitioners and research experiments.

play video

What are your thoughts on this video's production value? (quality of video and editing?)

What about its usefulness for learning?

Would you say this video is entertaining? (why or why not?)

Is the way a host is presented a factor for you?

Video 3: Academic Case Study
Explainers are bite-sized (1 minute) pieces about a single idea or theory. Each video is built around an explanation from an academic expert and illustrated with archival and contemporary footage.

play video

What are your thoughts on this video's production value? (quality of video and editing?)

What about its usefulness for learning?

Would you say this video is entertaining? (why or why not?)

Video 4: Academic Feature
Feature videos combine academic interviews and voice-overs with animation, archival materials and high-definition footage.

play video

What are your thoughts on this video's production value? (quality of video and editing?)

What about its usefulness for learning?

Would you say this video is entertaining? (why or why not?)

Closing

Thank you for participating in this focus group. Your answers will be very valuable in helping us improve our knowledge on media in education - for many future students to come.

Each of you will receive a £10 amazon gift card by email within the next 2 days.

Have a nice day! ☺

ii. Focus Group Transcription

Final video questions transcription:

Participant 6
Video 1
1. Excellent production quality and editing
2. Yes, very well explained small video in a simple manner for everyone to understand
3. Entertaining, well explained with light music in background, not disturbing

Video 2
1. Good quality but could be edited.
2. Probably not, easily distracted
3. Entertaining but not in academic context

Video 3
1. Probably the best production quality video and nicely edited
2. Yes, opinions from wide variety of people and no distractions
3. Very entertaining and engaging, visually appealing

Video 4
1. Good quality but could have edited it more to make it more engaging
2. Probably not, a bit complex, could have explained in a much simpler way
3. Very engaging with nice music in the background, visually appealing

Participant 2
Video 1
What are your thoughts on this video's production value? (quality of video and editing?)

- Good quality overall, speaker is articulate, nice to see subtitles as an option, would prefer if the animation was bigger so that there is not a lot of white space in the background

What about its usefulness for learning?

- Easy to understand, quick to the point, easy to follow

Would you say this video is entertaining? (why or why not?)

- Yes, but it is a bit distracting to see him reading the script

Video 2
What are your thoughts on this video's production value? (quality of video and editing?)

- Good quality overall, speaker is articulate, would like an option for subtitles, nice to an option to change speed setting, easy to understand with real life video shown with audio in the background

What about its usefulness for learning?

- Easy to understand, quick to the point, shows what the speaker is talking about with video clips inserted throughout the video

Would you say this video is entertaining? (why or why not?)

- Yes, but would prefer a different type of background music as it was a bit too loud and distracting

Video 3

What are your thoughts on this video's production value? (quality of video and editing?)

- Good quality overall, speakers are articulate, nice to see subtitles and speed settings as options, it was useful to see different perspectives of all kinds of people working in the company

What about its usefulness for learning?

- Easy to understand, quick to the point, useful in giving an understanding of what the company looks out for and what the working environment is like

Would you say this video is entertaining? (why or why not?)

- Yes, the background music was nice, and it was a good way to hear a variety of thoughts from various people within the organisation

Video 4

What are your thoughts on this video's production value? (quality of video and editing?)

- Moderate quality overall, speaker is articulate, nice to see subtitles and speed settings as options, did not really like the animation and clips included in the video

What about its usefulness for learning?

- Seems to have a lot of things going on and the music makes it rushed

Would you say this video is entertaining? (why or why not?)

- No, the music is a bit distracting and too many clips included in the video, seems a bit dull to watch

Participant 3

Video 1

What are your thoughts on this video's production value? (Quality of video and editing?)

The quality is very high and well edited. It is really professional.

What about its usefulness for learning?

It is quite useful because it helps to understand the definition and it was well explained. Especially it also comes with captions, which is really useful.

Would you say this video is entertaining? (why or why not?

Yes, I like the way it presented and the animation, the way how the lecturer speaks and the BGM. The length of the video is just right and grab my attention.

Video 2

What are your thoughts on this video's production value? (quality of video and editing?)

Good quality and edited well, but no captions included.

What about its usefulness for learning?

Good to understand but not thank useful comparing to the first video. The pictures and videos included are too much and I got distracted.

Would you say this video is entertaining? (why or why not?

Not as good as the first video. I started to lost my attention after the first 30 seconds because the way the BGM match to the talking makes me bored.

Video 3

What are your thoughts on this video's production value? (quality of video and editing?)

The quality of video is quite high and well edited. Everything goes on smoothly and link to each other.

What about its usefulness for learning?

Its quite useful as its related to the topic and captions are provided.

Would you say this video is entertaining? (why or why not?

Yes, the length is alright just some speakers talk too fast but the captions help a lot.

Video 4

What are your thoughts on this video's production value? (quality of video and editing?)

The quality is very high and the editing is good as well. I like the intro part and how they match the videos and animations.

What about its usefulness for learning?

It is very useful, the length is just right, not too long and too short. The captions are also included and the videos and animation included match the topic.

Would you say this video is entertaining? (why or why not?

Yes, I can focus more although it is a 5 minutes video. The way it presented grab my attention.

Participant 5

Video 1:

What are your thoughts on this video's production value? (quality of video and editing?)

The video is of high quality, the animations are detailed but simple to understand, it is clearly edited well, the time gone into this is clear.

What about its usefulness for learning?
It's a very informative video within the short timeframe and the animation helps me understand the concept, so it is very useful for learning.

Would you say this video is entertaining? (why or why not?)
The video is nice and short, which helps me stay engaged. The animation is helpful in making the video easy and fun to watch.

Video 2:
What are your thoughts on this video's production value? (quality of video and editing?)
It is really clear that the video is well edited and of high quality. I didn't feel like all of the photos / short clips of people in the video were necessary.

What about its usefulness for learning?
It's definitely very useful for learning, the video briefly and simply explains the topic with a useful example. There wasn't many animations here, and the one that was included on the silhouette of the man didn't add anything to the video in my opinion as it didn't help with the explanation.

Would you say this video is entertaining? (why or why not?)
The video is entertaining, I liked the example of Disney, I found it interesting and useful in my understanding of the topic.

Video 3:
What are your thoughts on this video's production value? (quality of video and editing?)
Very high production value of the clips and music behind it, they vary the music to fit well with different points of the video.

What about its usefulness for learning?
I think it is useful for learning, it feels like a valuable point on communication that they are developing in the context of L'Oréal. I think it is helpful that they are giving examples of how their business works and communicates to help me understand it better.

Would you say this video is entertaining? (why or why not?)
Yes, I think the music and short clips of people helped it feel motivating and inspiring. You get lots of different views and opinions in a short time frame.

Video 4:
What are your thoughts on this video's production value? (quality of video and editing?)

I like the animations, clips and photos to help explain, however the video and editing doesn't as high quality as the previous 3 videos. The visuals seem more pieced together and don't seem to flow as well.

What about its usefulness for learning?
I like the animation and visuals in the video, found it very helpful for learning. Potentially the music behind the person talking was too loud and a bit distracting.

Would you say this video is entertaining? (why or why not?)
The start of the video was a bit overwhelming, too much going on. The visuals are entertaining and help keep me stay engaged.

Participant 4

What are your thoughts on this video's production value? (quality of video and editing?)
Video 1:
I feel the video was very engaging, with the use of imagery and diagrams. The quality of it all was good with good editing, making it very easy to understand and follow.

Video 2:
The quality was of a high standard with good editing.

Video 3:
Very high quality and editing. It had a good flow to it and was visually appealing.

Video 4:
Very good quality and using good quality imagery and video clips.

What about its usefulness for learning?
Video 1:
It is very useful as it is engaging and easy to understand

Video 2:
It is very useful as it too is engaging, using imagery for each point. Eg, she mentioned Disney and then showed a clip of Disney land. This makes it easy to remember and understand and refer back to.

Video 3:
I found it very useful in terms of learning as the video showed different people from different back grounds and their different opinions and thoughts on the topic of communication.

Video 4:

I think its very useful for learning as its informative and uses imagery and video clips to support the spoken word. Using both visual and audio learnings.

Would you say this video is entertaining? (why or why not?)

Video 1:

Yes, in an educational way. Its easy to follow, making it easy to understand and ultimately remember and refer back in your mind to when needed.

Video 2:

Yes, the music is a nice touch and is informative while being entertaining with the imagery.

Video 3:

This video is entertaining because there was some light hearted humour, and the layout and feel of the video was very appealing and easy to understand and follow.

Video 4:

Yes, its visually appealing and easy to follow with the use of imagery.

b. Online Questionnaire

Section 1 of 4

Video Usage in Higher Education

This research aims to explore the use of specialised video usage in higher education.

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified or identifiable in any reports or publications. The only identifiable information will be the name of the institution you belong to (UEA) the year of study and student status (international/home/EU). Any data collected about you in the online questionnaire stored securely with password protection.

Data will be securely destroyed one month after the official end date of the project, which is 30/10/2022.

Thank you for your participation!

After section 1 Continue to next section

Section 2 of 4

Participant Consent Form

1. I confirm that I have read and understood the Information Sheet provided to me for the study/project, I have had the opportunity to ask questions and I am happy with the answers.
2. I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.
3. I understand that my participation is voluntary and that I can still withdraw at any time up to one month following completion of the web-based questionnaire and/or participation in the focus group. I do not have to give a reason.
4. I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that anonymised information about me will only be told to others with my permission, except as required by law.
5. I understand that the results of this study may be published, but these publications will not contain my name or any identifiable information about me.
6. I understand that the only identifiable information will be the name of the institution I belong to (UEA), the year of study and student status (international/home/EU).
7. I understand that any data gathered will be stored securely with password protection.
8. I understand that any un-anonymised data will be securely destroyed one month after the end date the project: 30/10/2022.
9. I agree to take part in this study

Please choose if you consent to the above terms and agree to take part in this study: *

- ○ Yes
- ○ No

After section 2 Continue to next section

Section 3 of 4

Video Platforms

This section will ask you about your experience and preferences regarding video-based learning platforms

Are you a UEA student? *

- ○ Yes
- ○ No

Are you studying a course from the Norwich Business School (NBS)? *

- ○ Yes
- ○ No

Which year are you in? *

- 1st year
- 2nd year
- 3rd year
- Other...

Do you watch videos related to your studies/course? *

- Yes
- No
- Sometimes

Are these studies/course-related videos: *

- Provided by your uni/instructors?
- Provided by you (you find them yourself)?
- Both
- Other...

How do you search for course/studies related videos? *

- ( ) Google
- ( ) Ask friends
- ( ) I watch those linked by my teacher/instructor
- ( ) Go to my preferred video-based learning platform website directly
- ( ) Other...

Which video-based platforms do you use to watch these videos? *

- [ ] YouTube
- [ ] Coursera
- [ ] Blackboard
- [ ] EdX
- [ ] Udemy
- [ ] Linkedin Learning
- [ ] Skillshare
- [ ] Other...

From the video providers mentioned above, which is your most preferred? *

- YouTube
- Coursera
- BlackBoard
- EdX
- Udemy
- Linkedin Learning
- Skillshare
- Other...

Which platform is most recommended to you by your instructors? *

- YouTube
- Coursera
- BlackBoard
- EdX
- Udemy
- Linkedin Learning
- Skillshare
- Other...

For personal skills or hobbies, do you use different video learning platforms? *

- ○ Yes
- ○ No
- ○ I don't use video learning platforms for skills or hobbies
- ○ Other...

If yes, which platform(s) do you use to watch videos related to personal skills or hobbies?

- ☐ YouTube
- ☐ Coursera
- ☐ BlackBoard
- ☐ EdX
- ☐ Udemy
- ☐ Linkedin Learning
- ☐ Skillshare
- ☐ Other...

Section 4 of 4

Video portion

This section will present to you four videos created by a UK based Digital Education provider.

You will be asked to watch each video and answer a series of questions. Please imagine that these videos are a part of your recommended watchlist by your instructor for your university course.

Video 1: Animated explainer

Animated explainers centre on an expert description of a concept, but uses animation in addition to video to facilitate understanding.

Simple Structures

Please check all that apply *

- [ ] I would re-watch this video if I need to revise/remember facts
- [ ] I would do follow-up readings on this topic for my course
- [ ] I took notes/would take notes if this were for my module
- [ ] I listened to this video more carefully than I usually do
- [ ] None of the above

Please check all that apply *

- [ ] I would watch more videos like this throughout the week for my studies
- [ ] I watched the entire video
- [ ] I would be interested in participating in online chats, discussions with the instructor or other students reg...
- [ ] This video would inspire me to take part actively in small-group discussion forums
- [ ] I would be able to help explain this topic to other students after watching this video
- [ ] I want to hear more from the speaker in this video
- [ ] None of the above

Please check all that apply *

- [ ] I thought of ways to make this material relevant to my life
- [ ] I can apply these learnings to my life
- [ ] I thought of ways that this topic relates to me
- [ ] I desire to learn the material through videos like this
- [ ] I can think about my own ethics, priorities, beliefs and values in the context of this video
- [ ] None of the above

Please check all that apply: *

- [ ] I would like to use videos like this to help me get a good grade
- [ ] I would be interested in emailing my instructor questions related to this video
- [ ] I think watching videos like this can increase my knowledge about subjects
- [ ] Videos like this would help me study for my course
- [ ] None of the above

Please rate this video on production value (quality of video and editing) *

	1	2	3	4	5	
Low production value	○	○	○	○	○	High production value

Please rate this video on learning (easy to understand and informative) *

	1	2	3	4	5	
Low learning potential	○	○	○	○	○	High learning potential

Please rate this video on entertainment *

	1	2	3	4	5	
Not entertaining	○	○	○	○	○	Very entertaining

Video 2: Short Explainer

Explainers are bite-sized (1 minute) pieces about a single idea or theory. Each video is built around an explanation from an academic expert and illustrated with archival and contemporary footage.

Socialisation

Please check all that apply *

- [ ] I would re-watch this video if I need to revise/remember facts
- [ ] I would do follow-up readings on this topic for my course
- [ ] I took notes/would take notes if this were for my module
- [ ] I listened to this video more carefully than I usually do
- [ ] None of the above

Please check all that apply *

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- [ ] Videos like this would help me study for my course
- [ ] None of the above

Please rate this video on production value (quality of video and editing) *

	1	2	3	4	5	
Low production value	○	○	○	○	○	High production value

Please rate this video on learning (easy to understand and informative) *

	1	2	3	4	5	
Low learning potential	○	○	○	○	○	High learning potential

Please rate this video on entertainment *

	1	2	3	4	5	
Not entertaining	○	○	○	○	○	Very entertaining

Video 3: Academic case study

Case studies aim to capture real insight into companies, practitioners and research experiments.

L'Oreal

Please check all that apply *

- [ ] I would re-watch this video if I need to revise/remember facts
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- [ ] I took notes/would take notes if this were for my module
- [ ] I listened to this video more carefully than I usually do
- [ ] None of the above

Please check all that apply *

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- [ ] I watched the entire video
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- [ ] None of the above

Please check all that apply *

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- [ ] I can think about my own ethics, priorities, beliefs and values in the context of this video
- [ ] None of the above

Please check all that apply: *

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- [ ] I think watching videos like this can increase my knowledge about subjects
- [ ] Videos like this would help me study for my course
- [ ] None of the above

Please rate this video on production value (quality of video and editing) *

	1	2	3	4	5	
Low production value	○	○	○	○	○	High production value

Please rate this video on learning (easy to understand and informative) *

	1	2	3	4	5	
Low learning potential	○	○	○	○	○	High learning potential

Please rate this video on entertainment *

	1	2	3	4	5	
Not entertaining	○	○	○	○	○	Very entertaining

Video 4: Academic Feature

Feature videos combine academic interviews and voice-overs with animation, archival materials and high-definition footage.

Entrepreneurship

Please check all that apply *

- [ ] I would re-watch this video if I need to revise/remember facts
- [ ] I would do follow-up readings on this topic for my course
- [ ] I took notes/would take notes if this were for my module
- [ ] I listened to this video more carefully than I usually do
- [ ] None of the above

Please check all that apply *

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- [ ] None of the above

Please check all that apply: *

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- [ ] I think watching videos like this can increase my knowledge about subjects
- [ ] Videos like this would help me study for my course
- [ ] None of the above

Please rate this video on production value (quality of video and editing) *

	1	2	3	4	5	
Low production value	○	○	○	○	○	High production value

Please rate this video on learning (easy to understand and informative) *

	1	2	3	4	5	
Low learning potential	○	○	○	○	○	High learning potential

Please rate this video on entertainment

	1	2	3	4	5	
Not entertaining	○	○	○	○	○	Very entertaining

Which video style do you find most useful for learning? *

- ○ Animated explainer
- ○ Short explainer
- ○ Academic case study
- ○ Academic feature
- ○ None

Which video style do you find most entertaining? *

- ○ Animated explainer
- ○ Short explainer
- ○ Academic case study
- ○ Academic feature
- ○ None
- ○ Other...

If you are happy to be contacted further to join an online focus group for this project, then please leave your email below:

Short answer text

Would you like to be included in the prize draw to win an Amazon voucher? (email must be provided above with an interest to take part in the focus group)

- ◯ Yes
- ◯ No

Thanks for your participation!

Description (optional)