

# YouTube as a Digital Learning Tool: Analyzing its Effectiveness in Supporting Student Education

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## ABSTRACT

**Aim of the Study:** In today's society, online media, particularly social media, has a significant influence on young people. Therefore, this research study aimed to examine the effects of YouTube on students' education in Pakistan.

**Methodology:** To collect data from the participants, the researchers used a survey approach in conjunction with a quantitative study design. A self-designed questionnaire, consisting of Likert scale close-ended questions in three parts (respondents' demographics, general usage of YouTube, and educational benefits), was used to collect data from 192 respondents. The researchers utilized non-probability available and convenient sampling to collect data from students in Rawalpindi. The questionnaire was distributed to the target audience via Google Forms and WhatsApp.

**Findings:** According to the research, YouTube is the most widely used social networking site among youth, especially students. Students usually use YouTube for their educational purposes and argued that variety of lectures available online that play key role in learning among university students.

**Conclusion:** The study concluded that YouTube has a positive impact on students' educational activities, co-curricular activities, and skill enhancement. Students found satisfy from the lectures/content available online.

**Keywords:** Social Media, YouTube, Education Effects, Students.

## 1. INTRODUCTION

With 500 hours of content posted per minute on average, YouTube's ever-growing library of videos offers a multitude of uses for users. In addition to much more, it offers news, opinion, entertainment, and how-to videos. Still, it begs the issue of how useful YouTube is for educators and learners. The fact is that millions of educators and learners use YouTube every day for educational purposes all around the world. It could be argued that YouTube is the most popular destination for online learning in the world. However, the effectiveness of using YouTube in the classroom depends greatly on how it is utilized (Barnwell, 2021).

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E-Learning driven world is experiencing new set of skills, (core generic and professional), to be included in the prospective education to contribute at global scenario (Pachuri, 2011). Student learning performance increases seen from factors that have a significant influence of motivation, instructional content, and YouTube usefulness. Motivation was found to be the most important factor, followed by instructional content and YouTube usefulness. Overall findings suggest that YouTube has a significant role to student learning performance in music production education and as an innovative and efficient learning medium. The researchers recommend that instructors use YouTube as a learning tool to supplement their instruction (Pratama et al., 2023).

YouTube can be an effective online learning medium, particularly in fostering independent learning among students. Parents also find YouTube to be a helpful resource for supporting their children's education. Additionally, the accessibility and flexibility of YouTube make it a convenient tool for both teachers and students (Rahmatika et al., 2021). The traditional approaches to education are facing unprecedented challenges in today's rapidly expanding digital landscape. As technology becomes increasingly integrated into our daily lives, new platforms are emerging that are transforming the way we learn. One such platform is YouTube, which has evolved into an effective, educational tool, reshaping the educational landscape and democratizing access to information. With its engaging videos and informative content, YouTube provides educators and learners with an unprecedented opportunity to engage, inspire, and revolutionize the learning process.

One social media site that explains its goals as enabling people to express themselves, be heard, and learn about the society they live in is YouTube (YouTube, 2020). Over 2 billion people routinely view videos on YouTube. The majority of YouTube viewers are in the 18–34 age range. Over one billion hours of video are seen on YouTube per day, according to data released by the platform (YouTube, 2020). YouTube and other social media sites have emerged as a substitute for traditional educational pathways. Gilroy (2010, p. 22) claims that social media has altered how the general public "interacts with and perceives higher education." This implies that social media makes higher education more accessible and available to the general audience.

The aim of this study is to offer valuable new insights into the correlation between students' YouTube usage and their academic performance. It seeks to fill these knowledge gaps by presenting evidence-based findings using a comprehensive methodology supported by academic literature.

### ***1.1 Problem Statement***

The widespread use of YouTube among adolescent students in Pakistan has raised concerns about its potential educational consequences. Users may upload and share videos of themselves and other people on the YouTube platform. The app is particularly popular among adolescents, with an estimated 14.7 million users in Pakistan. Especially after the COVID-19 pandemic, teaching methods have become more advanced and online learning has become popular among students. The trend of self-learning has increased among both students and teachers. While YouTube can provide a platform for expression and creativity, there is growing evidence that excessive use of the app can have negative educational consequences. These consequences can include a decrease in academic performance, lack of focus, and reduced engagement in traditional learning methods. Therefore, researchers want to investigate whether excessive use actually has a negative impact on a student's education.

### ***1.2 Significance of Study***

The research investigated the popularity of the social media app, YouTube, which is widely used by students for educational videos. When a platform is used frequently, its impact on students' education. Becomes apparent. With the help of this study, we hope to shed light on the increasingly significant

implications that students' use of YouTube is having on their academic performance. The goal was to help users understand these effects and guide them in using the platform appropriately.

### ***1.3 Research Question***

1. How long does users spend on average daily for educational videos on YouTube?
2. What is the ideal duration of an educational video on YouTube?
3. How does YouTube help to enhanced skills of students in education?
4. Does YouTube give assistance of motivation in educational activities?
5. Is YouTube useful for engagement level in educational purpose?
6. How YouTube is helpful for assignments?
7. Is YouTube is beneficial for students in quiz?
8. Is YouTube useful for co-curricular activities?
9. Is YouTube helpful in increasing grades?
10. Is YouTube content useful for presentations?

## **2. LITERATURE REVIEW**

Rahman et al., (2016), The study's objective was to determine how well YouTube can be used to enhance computer literacy among students at Najran University. With experimental and control groups, the study employed a quasi-experimental methodology. 48 students at level two of the General Diploma in Education who was enrolled in the "Computer in Education" course during the second semester of the academic year (1435 – 1436 Ah/ 2014 – 2015) makes up the study sample. The results of the study showed that there were statistically significant differences, favoring the experimental group in the post-measurements of the academic achievement test and the observation card for using computers in education, between the students' mean scores of the experimental group (which learned using YouTube) and the students' mean scores of the control group (which learned using traditional methods).The study comes to the conclusion that YouTube is a useful resource for enhancing computer literacy in the classroom.

Kusumawardani et al., (2023), By examining the variables that influence students' learning performance, this study seeks to evaluate the effectiveness of YouTube as a learning tool in raising student performance. One hundred JAS responders at the audio mastering level are included in the sample. The researchers used a questionnaire to collect data from the respondents. The questionnaire asked about the respondents' motivation, their perception of the instructional content of the YouTube videos, and their perception of the usefulness of YouTube as a learning tool. The findings demonstrated that motivation, instructional content, and YouTube utility are key determinants of student learning performance gains. The most crucial element was determined to be motivation, which was followed by YouTube utility and instructional material. Overall results point to YouTube as an effective and novel learning tool that significantly influences student learning performance in music production education. The researchers recommend that instructors use YouTube as a learning tool to supplement their instruction.

Rahmatika et al., (2021), the aim of this study is to analyze the effectiveness of YouTube as an online learning medium in the context of the COVID-19 pandemic. This study employs a qualitative research approach, utilizing interviews, observations, and documentation as data collection techniques. The participants are three elementary school teachers who have implemented YouTube as an online learning tool during the pandemic. The study's conclusions show that YouTube may be a useful tool for online education, especially when it comes to encouraging students to learn on their own. Parents also find

YouTube to be a helpful resource for supporting their children's education. Additionally, the accessibility and flexibility of YouTube make it a convenient tool for both teachers and students. The study concludes that YouTube can be a valuable asset in the realm of online learning. However, careful consideration should be given to the selection of YouTube videos to ensure they are aligned with the learning objectives and appropriate for the age and developmental level of the students.

Al-Omari et al., (2021), to investigate how well Jordanian students studying English as a foreign language (EFL) are taught speaking skills using YouTube videos. Eighty students who were enrolled in Oral Skills classes in the English Language and Literature Department at a private university in Jordan made up the study sample. Each of the two groups—the experimental group and the control group—consists of forty pupils. YouTube videos were used to teach the speaking abilities to the experimental group, whereas the conventional method was used for the control group. The two groups were given a pre-test and a post-test. The IELTS speaking band descriptors, which fall into four key categories—fluency & coherence, lexical resource, grammatical range & correctness, and pronunciation—were used to grade the participants' performance by four TEFL specialists. The results demonstrated that both groups' performance had improved. Still, the experimental group showed a comparatively superior improvement than the traditional group. The kids who participated in the YouTube experiment showed noteworthy advancements in their speaking abilities, as indicated by the outcomes. Pronunciation and fluency & coherence were the two most significantly progressed constructs among the four under consideration in the YouTube experimental group's performance. According to the current study, integrating YouTube videos into EFL classes might help students become more proficient speakers.

Shoufan (2018), to find out how much cognitive features—as defined by the cognitive theory of multimedia learning—are supported by instructional videos on YouTube, and how much this support extends to students' learning. Based on a poll they performed to better understand the semantics of Likes and Dislikes of YouTube's instructional films, the authors specifically used the number of Likes to estimate the Video Cognitive Value. Next, 105 films were gathered as a sample and their cognitive properties were examined. Regression analysis revealed that just four of the 10 factors under investigation—pretraining, modality, spatial contiguity, and embodiment—were significant, and that the regression model could only account for 63% of the variation in the data. Additional tests were conducted to account for additional variables, including the speaker's gender, native English speaking ability, speaking pace, video length, and production style. The corrected R-square value (68%), as shown by the extended model, was only little improved. Pretraining, modality, spatial contiguity, and embodiment are the only four of the 10 characteristics that were found to be significant, and the regression model was only able to account for 63% of the variation in the data. These findings imply that more investigation is needed to pinpoint and identify other cognitive elements in instructional films in order to gain a better comprehension of the cognitive usefulness of the videos.

Brame & Perez (2016), The aim of this study was to review the literature on the use of educational videos and to identify the principles that make videos effective in promoting student learning. The research on the usage of instructional films were reviewed by the writers. They searched for studies that were published in peer-reviewed journals and that focused on the use of videos in higher education. Cognitive load: Videos should be designed to minimize the amount of mental effort required to process information. Student engagement: Videos should be designed to capture and maintain student interest. Active learning: Videos should be utilized to encourage student participation in the learning process, often known as active learning. The authors also found that there are a number of practical ways that instructors can use these principles to create effective educational videos. For example, instructors can use shorter videos, break up videos into segments, and use visuals and animations to make videos more engaging. The authors conclude that educational videos can be an effective tool for promoting student learning when they are designed and used in a way that considers cognitive load, student engagement, and active learning.

Amutabi (2021), investigated Takoradi Technical University students' opinions about using YouTube for instructional and learning objectives. In order to stratify the population, a total of 1200 structured questionnaires were issued to MTECH, BTECH, HND, and Diploma students across all five faculties. Within each program, random selection was conducted using descriptive statistics for analysis. According to 52% and 51.8% of the respondents, respectively, utilizing YouTube as a learning tool helps students' understanding and motivates them more. According to over 50% of the participants, YouTube not only demystifies learning but also makes it more engaging, improves practical training, motivates learning, and allows for the customization of learning experiences. The study suggested that one of the instruments and methods for teaching technical programs in Ghana should be YouTube, for use by curriculum designers of technical education in Ghana.

Chitra, (2021), the purpose of this study is to look at the technology-enhanced learning-focused YouTube channels of three researchers: Michael Wesch, Wendy Drexler, and Dave Cormier. The main objective is to examine videos that are tagged as "instruction" on the corresponding channels in order to comprehend the type of information that is shared and how it is distributed.

Researchers with personal or university-affiliated channels are more inclined to share videos resulting from their scholarly work, often attributing copyright to their respective institutions. The analyzed videos across these channels delve into similar themes regarding the integration and application of technology in education but differ in their presentation styles and methods of communication. Videos on the "instruction" category of Dave Cormier, Wendy Drexler, and Michael Wesch's YouTube channels were content-analyzed for this study. The examination aimed to comprehend the nature and dissemination strategies of the shared content. The study highlights that scholars, particularly those associated with personal or institutional channels, are actively disseminating educational content through YouTube. While these contents align in themes concerning technology's role in education, the delivery approaches differ among the researchers.

Orís et al., (2016), looked on how YouTube user-generated content affects learning objectives and satisfaction. A research involving marketing course participants was carried out. The lecturers allowed the students to actively engage in making videos, which they then posted to a YouTube channel. Students filled out a form evaluating their satisfaction and learning results at the end of the course. Academic achievement and the perception of acquiring cross-curricular competences were directly impacted by active engagement. Participation had an indirect impact through cross-curricular competences, even though it had no direct impact on subjective learning or course satisfaction. Students' happiness and learning results are positively impacted by learner-generated material and using YouTube as a teaching tool.

Breslyn & Green (2022), This study looked into how teachers and students used YouTube's teaching videos for chemistry online in light of the Covid-19 epidemic. Information was gathered from a worldwide sample of students (n = 1147) who were subscribers to the first author's well-liked YouTube channel for chemistry teaching. The participants, who were in secondary school or college, stated that they had studied science in a range of settings, such as fully online, somewhat online, or entirely in-person. An online questionnaire was used as the data collecting tool in order to identify changes in the utilization of instructional videos on both a quantitative and qualitative level. Furthermore, data was collected on the total number of views (98.6 million) for the YouTube channel dedicated to chemistry education from 2018 to 2021. This allowed for the demonstration of patterns in video consumption with a sizable sample size, including the period before to and including the Covid-19 epidemic. Results show that during the epidemic, students' individual consumption of scientific videos rose significantly. But for most educators, their usage of video to supplement online instruction either didn't change throughout the epidemic or decreased. Students intend to keep utilizing scientific films for studying after the epidemic, and they want instructors to follow suit. This study offers proof that YouTube videos may be an effective teaching and learning resource for science for both teachers and students. However, more research is needed to understand how to effectively integrate videos into science instruction.

Alnoori & Alnoori (2021), to assess the impact of instructional films on college students' academic performance and activities. A quantitative research made use of a sample survey. To gather data, a semi-structured questionnaire was given to twenty university students. The study's findings demonstrated that watching educational films enhanced the academic performance and activities of the respondents. Most of the respondents watched videos on laptops and mobile phones. The study also revealed that animated educational videos and short films were favored by the majority of respondents. The study's conclusions imply that instructional videos can be a useful tool for raising academic achievement among college students. When creating and utilizing instructional videos, educators and video producers ought to take these results into account.

Mostafa et al., (2023) support a research study on fifteen years of academic research on YouTube: hot subjects, collaborative networks, and knowledge structure. On this channel, there weren't enough bibliometric reports.. The target of the research study was bring bibliometric analysis on YouTube to attain this gap. This study, which used the quantitative research approach, analyzed 1781 articles that were gathered over a fifteen-year period from the Scopus database. This study reveals that while YouTube research was only getting started in 2006–2007, it grew quickly in 2007–2017, and from 2017–2021, it was thought to be at a more stable and balanced stage. This study was conclude that in beginnings there was a slow growth, then growth became rapidly increased afterwards it is still upwards with slow pace. This research also founded that trending topics get changed over the time. Three clusters—user-generated material, health and medical difficulties, and information quality—were also determined by this study.

Rajendra et al., (2019) supervised the research study of "Benefits of Videos in YouTube for the Undergraduate Students in Engineering and Technology in India. The goal of the study was to understand why and how Indian undergraduate engineering and technology students preferred to use YouTube videos. This study employed a survey approach with a questionnaire to collect data in an attempt at a quantitative research design. The frequency and percentage technique was used to analyze the data. According to this study, students who use YouTube videos are more engaged in their academic work. More than 95 percent of the participants acknowledge and firmly believe that YouTube videos contribute to their moral, cultural, and educational lives. According to this study, students utilized YouTube to develop their cultural, behavioral, and educational well-being.

Kariapper (2020) conduct a research study about "Impact of YouTube in Higher Education in Sri Lanka". The target of the study to recognized the components that encourage the students to accede and use YouTube, for educational objectives. In this research study , he was used correlation analysis, Three latent variables (adoption, purposes, and educational usage) and eight observed variables (usefulness, social influence, facilitating conditions, work-related, social relations, communication, collaboration, and resource/material sharing) make up the suggested model designed to shed light on the educational use of YouTube. Three observable variables—usefulness, social influence, and conducive conditions—explained adoption as a latent variable. The results of this study indicate that there are strong correlations between usefulness and social influence (0.612), usefulness and communication (0.592), and social influence and communication (0.556).These results confirm that using YouTube to get more knowledge and comprehend subjects by viewing videos has a big impact on higher education in Sri Lanka today. Additionally, YouTube enhances classroom debates and lecturer-student contact.

Sarah and Tabea (2021) was regulate a research study regarding "Potentials and Limitations of Educational Videos on YouTube for Science Communication" they described two things in their research study, first one was: viewing educational content changed the behaviour of receiver and second , studied questions whether educational videos have more influence than other informative content. They did quantitative research study , they designed research questions . In contrast to traditional teaching methods, e-learning technologies increased learning results, according to their study. Students rated the quality of both informational resources in their study and concluded that videos were better than textbooks. These studies are similarly similar in that they demonstrate how effective videos are overall compared to other

learning materials. The study's conclusion discusses the advantages and disadvantages of using YouTube's instructional videos to communicate science.

Moneeba et al., (2019) arranged research study about "Impact of YouTube Tutorials in Skill Development among University Students of Lahore" The aim of this research was to quantify the demand for YouTube tutorials among young people, taking into account their reliance on these videos and their efficacy. Data were gathered using the survey technique, and the study's hypothesis was tested using statistical linear regression analysis. The outcome shows that the influence of the dependent variable causes a 74% variation in the dependent variable, indicating that YouTube lessons are crucial for students' skill development. The study "Impact of YouTube Tutorials in Skill Development among University Students of Lahore" came to the conclusion that YouTube tutorials should be given more attention because of the youth of Lahore's reliance on them for learning as well as their cognitive needs when it comes to developing knowledge of a particular program or piece of software from an approximate beginner's level.

### ***2.1 Theoretical Framework***

George Gerbner's cultivation theory, which he created in the 1960s, was used in this research investigation. It implies that a person's sense of reality is shaped by frequent exposure to media information, which in turn affects their attitudes and beliefs. In 1980, Gerbner, Gross, Morgan, and Signorielli published a book. Researchers conducted this research based on this theory and assumed that individuals who extensively used media, specifically YouTube, experienced more helpful in achieving positive educational outcomes. This assumption was based on our research conducted among adolescent students in Pakistan.

## **3. RESEARCH METHODOLOGY**

### ***3.1. Research Design***

The effects of YouTube on education were studied by the researcher using a quantitative survey approach with a sample of individual Rawalpindi students.

### ***3.2 Population & Sample Frame***

The target population for this study comprised students aged 16 to 28 residing in Rawalpindi, Pakistan. Data for this research came from Pakistani students in Rawalpindi.

### ***3.3 Sampling Technique***

A convenience sampling methodology was utilized to pick 192 individuals from the target population using a non-probability selection technique. Convenience sampling was chosen due to its practicality and accessibility, allowing the researcher to readily recruit participants from various level of education within Rawalpindi.

### ***3.4 Data Collection Tool***

A self-design questionnaire served as the primary data collection tool. The questionnaire consisted of the 16 questions, encompassing demographics, general information and other aspects relevant to the study variables. Most questions utilized a Likert scale format.

### ***3.5 Data Analysis***

The researcher utilized SPSS version 26 to analyze the collected data. The results were presented in tabular format, providing insights into the various aspects of the study.

#### 4. RESULTS

**Table 1:** *Respondents' Demographics*

Respondents' Demographics		<i>f</i>	%
Age	16-19	26	13.5
	20-23	125	65.1
	24-27	25	13.0
	20 or older	16	8.3
	Total	192	100.0
Marital Status	Single	168	87.5
	Married	24	12.5
	Total	192	100.0
Education Level	Matric	1	.5
	Inter	20	10.4
	BS	155	80.7
	MPHIL	16	8.3
	Total	192	100.0

This table depicts the distribution of participant age groups in a research study, showing the percentage and cumulative percentage of respondents across different age brackets. The distribution of marital status among research participants is shown in the table, along with the percentage and cumulative percentage of single and married people. The education levels of 192 participants are shown in this table, along with the frequency and percentage of individuals falling into each educational category. 8.3% of the population education have MPHIL's degree, while 80.7% of people only have a bachelor's degree.

**Table 2:** *How much time you spend daily on education videos on YouTube? (N=192)*

QUESTION	1-2 hour	2-3 hours	3-4 hours	> 4 hours	Total	M	S.D
How much time you spend daily on educational videos on YouTube?	140 (72.9)	34 (17.7)	13 (6.8)	5 (2.6)	192 (100)	1.39	0.730

The majority of respondents (72.9%) reported spending 1–2 hours daily watching educational videos on YouTube. A smaller portion (17.7%) spent 2–3 hours, while 6.8% watched for 3–4 hours, and only 2.6% exceeded 4 hours daily. The overall mean viewing time was 1.39 hours with a standard deviation of 0.730, indicating low variation in responses.

**Table 3:** *Ideal duration for an educational video on YouTube (N=192)*

QUESTION	5-15	16-30	31-45	Total	M	S.D
Ideal duration for an educational video on YouTube	108 (56.3)	65 (33.9)	19 (9.9)	192 (100.0)	1.54	.670

More than half of the respondents (56.3%) considered 5–15 minutes as the ideal duration for an educational video on YouTube. About 33.9% preferred videos lasting 16–30 minutes, while only 9.9% favored durations of 31–45 minutes. The mean preferred duration was 1.54 with a standard deviation of 0.670, showing a moderate consensus among participants.

**Table 4: Impact of YouTube on Education**

QUESTION	SDA	D	N	A	SA	Total	M	S.D
Enhanced skills of students in education from YouTube	5 (2.6)	6 (3.1)	33 (17.2)	63 (32.8)	85 (44.3)	192 (100.0)	4.21	.910
YouTube is useful for students in educational activities	7 (3.6)	10 (5.2)	17 (8.9)	93 (48.4)	65 (33.9)	192 (100.0)	4.15	.862
Helpful for students in engagement level for educational purpose	6 (3.1)	6 (3.1)	36 (18.8)	110 (57.3)	34 (17.7)	192 (100.0)	3.91	.807
YouTube videos are helpful for assignment	8 (4.2)	9 (4.7)	26 (13.5)	108 (56.3)	41 (21.4)	192 (100.0)	3.96	.855
YouTube is beneficial for students in quiz	23 (12.0)	12 (6.3)	39 (20.3)	92 (47.9)	26 (13.5)	192 (100.0)	3.56	1.133
YouTube is useful for co-curricular activities	11 (5.7)	12 (6.3)	26 (13.5)	117 (60.9)	26 (13.5)	192 (100.0)	3.80	.901
YouTube is helpful in increasing grades	26 (13.5)	11 (5.7)	58 (30.2)	77 (40.1)	20 (10.4)	192 (100.0)	3.37	1.159
YouTube content is useful for making presentations	2 (1.0)	15 (7.8)	28 (14.6)	113 (58.9)	34 (17.7)	192 (100.0)	3.99	.667

The data reveals that YouTube plays a significant role in supporting students' educational activities. A majority of respondents (44.3%) strongly agreed and 32.8% agreed that YouTube enhances students' educational skills, reflected in a high mean score of 4.21 and a standard deviation of 0.910. Similarly, 48.4% agreed and 33.9% strongly agreed that YouTube is useful for educational purposes, with a mean of 4.15, indicating strong positive perception.

Regarding engagement, 57.3% of students agreed and 17.7% strongly agreed that YouTube helps maintain their interest in educational content. The mean value here was 3.91, with a relatively low standard deviation (0.807), showing consistent responses. When it comes to assignments, 56.3% of students agreed and 21.4% strongly agreed that YouTube videos assist them in completing academic tasks. This is supported by a mean of 3.96, indicating general agreement.

In terms of quizzes, responses were more varied. While 47.9% agreed that YouTube is beneficial, 12% strongly disagreed and 20.3% were neutral. The mean score was 3.56 with a relatively higher standard deviation of 1.133, suggesting differing opinions. Similarly, for co-curricular activities, 60.9% agreed that YouTube is useful, but a small percentage either disagreed or strongly disagreed. The mean score was 3.80.

On the topic of improving grades, responses were more mixed. Only 40.1% agreed and 10.4% strongly agreed, while 13.5% strongly disagreed and 30.2% remained neutral. The mean score of 3.37 with a standard deviation of 1.159 indicates greater variation in opinions.

Finally, YouTube was widely regarded as helpful for creating presentations, with 58.9% agreeing and 17.7% strongly agreeing. This item had a high mean score of 3.99 and a low standard deviation of 0.667, showing strong and consistent support for this function.

Overall, students perceive YouTube as a valuable tool in various educational aspects, especially for learning support, assignment completion, and presentation preparation, though opinions are slightly less positive when it comes to quiz performance and grade improvement.

**Table 5:** *How would you describe the overall impact of YouTube in education? (N=192)*

QUESTION	Very (+)	+ve	Neutral	(-ve)	Very (-)	Total	M	S.D
How would you describe the overall impact of YouTube in education?	24 (12.5)	108 (56.3)	43 (22.4)	5 (2.6)	12 (6.3)	192 (100.0)	2.16	.663

The majority of respondents (56.3%) viewed YouTube’s impact on education positively, while 12.5% rated it very positively. About 22.4% remained neutral, and only a small percentage (8.9%) held negative views. The overall mean score was 2.16 with a standard deviation of 0.663, reflecting generally favorable perceptions.

## 5. DISCUSSION

The data presented reflects a positive perception of YouTube as an educational tool among students. A large proportion of respondents indicated that they spend 1–2 hours daily watching educational videos on YouTube, with a mean of 1.39 hours and a low standard deviation (0.730), suggesting consistency in usage behavior. This aligns with the findings of Duffy (2008), who emphasized YouTube's growing role as a self-directed learning platform among youth due to its accessibility and engaging visual content. Regarding the ideal length of educational videos, over half of the students (56.3%) preferred videos lasting 5–15 minutes. This supports Guo et al. (2014), who concluded that student engagement with educational videos drops significantly when the length exceeds 6–9 minutes. The finding highlights the importance of concise, focused video content in maintaining viewer attention and maximizing learning outcomes. The perception of YouTube’s educational impact is overwhelmingly positive. In terms of enhancing educational skills, 77.1% of students either agreed or strongly agreed. Similarly, 82.3% acknowledged that YouTube is useful in educational activities. These responses are consistent with the work of Kay (2012), who reported that students perceived YouTube as helpful for understanding complex topics and supplementing lecture content. Furthermore, 75% of respondents believed that YouTube aids in student engagement, and 77.7% found it helpful for completing assignments. This is echoed by Jones and Cuthrell (2011), who suggested that YouTube encourages active learning by offering real-world examples and dynamic illustrations that traditional textbooks may lack. Although most respondents considered YouTube beneficial for quizzes (61.4%), the variation in responses ( $M = 3.56$ ,  $SD = 1.133$ ) indicates some uncertainty. This could be attributed to differences in how quiz content is structured or a lack of direct alignment between video content and quiz formats. For co-curricular activities, 60.9% of students agreed that YouTube plays a supportive role. Moreover, a notable 76.6% felt YouTube content helped them in preparing presentations. This supports the argument of Burden and Atkinson (2008), who emphasized the role of multimedia content in developing students' communication and digital literacy skills. Interestingly, perceptions were more divided when it came to the impact of YouTube on academic grades. While 50.5% agreed or strongly agreed with its positive role, a significant portion either remained neutral or disagreed. This may reflect the complexity of academic performance, which depends on multiple factors beyond just exposure to educational videos. Finally, when asked about the overall impact of YouTube in education, 68.8% viewed it positively or very positively. The low standard deviation (0.663) further suggests consensus among participants. This supports Berk’s (2009) view that YouTube, when effectively integrated into pedagogy, enhances student motivation, comprehension, and participation. In summary, the findings affirm that YouTube serves as a valuable educational supplement, particularly in improving engagement, aiding assignments, and enhancing presentation skills. However, its role in boosting academic grades requires further investigation.

## 6. CONCLUSION

The majority of students acknowledged YouTube’s positive impact on enhancing academic skills, supporting assignments, improving engagement, and helping with presentations. These responses suggest that YouTube serves not only as a supplementary learning tool but also as a platform that encourages self-paced and visually enriched learning experiences. While students expressed largely favorable views about

YouTube's role in education, the results also revealed mixed perceptions regarding its direct impact on academic performance, such as grades and quiz preparation. This suggests that while YouTube enhances learning engagement and comprehension, it may not be a standalone factor in improving academic outcomes. Overall, the data supports the integration of YouTube into academic settings as a valuable aid for learning and content reinforcement. However, its use should be balanced with other instructional methods and guided by educators to ensure relevance and effectiveness. Future studies should explore how to best align YouTube content with curriculum objectives to maximize its educational potential.

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### **REFERENCES**

- Al-Bataineh, A., Al-Qudah, A., Al-Omari, M., Al-Kharabsheh, H., & Al-Jundi, S. (2021). The use of YouTube in developing the speaking skills of Jordanian EFL university students. *Heliyon*, 7(7), e07543. <https://doi.org/10.1016/j.heliyon.2021.e07543>
- Amutabi, M. (2021). Exploring the Use of YouTube and its Implications to Teaching and Learning in Technical University Education in Ghana. *Journal of African Interdisciplinary Studies*, 5(7), 46 – 59.
- Babu H., Rajendra, Buddayya, R., & Gujjarappa, N. L. (2019). "Benefits of videos in YouTube for the undergraduate students in engineering and technology in India." *Webology*, 16(2), Article 190. Available at: <http://www.webology.org/2019/v16n2/a190.pdf>
- Berk, R. A. (2009). Multimedia teaching with video clips: TV, movies, YouTube, and mtvU in the college classroom. *International Journal of Technology in Teaching and Learning*, 5(1), 1–21.
- Brame, C. J., & Perez, K. E. (2016). Effective educational videos: Principles and guidelines for maximizing student learning from video content. *CBE—Life Sciences Education*, 15(4), es6. <https://doi.org/10.1187/cbe.16-03-0125>
- Breslyn, W., & Green, A. E. (2022). Learning science with YouTube videos and the impacts of Covid-19. *Disciplinary and Interdisciplinary Science Education Research*, 4(13), 22-32. <https://doi.org/10.1186/s43031-022-00051-4>
- Burden, K., & Atkinson, S. (2008). Evaluating pedagogical affordances of media sharing Web 2.0 technologies: A case study. In *Proceedings of the European Conference on e-Learning* (pp. 151–158).

- Chitra, P. (2021). YouTube And Its Role In Education Content: A Descriptive Overview. *Webology*, 18(6), 2725. Retrieved from <http://www.webology.org>
- Cite this article Mostafa, M.M., Feizollah, A. & Anuar, N.B. Fifteen years of YouTube scholarly research: knowledge structure, collaborative networks, and trending topics. *Multimed Tools Appl* 82, 12423–12443 (2023). <https://doi.org/10.1007/s11042-022-13908-7>
- Duffy, P. (2008). Engaging the YouTube Google-Eyed generation: Strategies for using Web 2.0 in teaching and learning. *Electronic Journal of e-Learning*, 6(2), 119–130.
- Ebied, M. M., Kahouf, S. A., & Rahman, S. A. A. (2016). Effectiveness of using YouTube in enhance the learning of computer in education skills in Najran University. *International Interdisciplinary Journal of Education*, 5(3), 619-625.
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1980). "The 'Mainstreaming' of America: Violence Profile No. 11." *Journal of Communication*, 30(3), 10-29.
- Guo, P. J., Kim, J., & Rubin, R. (2014). How video production affects student engagement: An empirical study of MOOC videos. In *Proceedings of the first ACM conference on Learning@ scale conference* (pp. 41–50). <https://doi.org/10.1145/2556325.2566239>
- Iftikhar, M., Riaz, S., & Yousaf, Z. (2019). Impact of YouTube tutorials in skill development among university students Pakistan. *Journal of Distance and Online Learning*, 5(2), 125-138.
- Jones, T., & Cuthrell, K. (2011). YouTube: Educational potentials and pitfalls. *Computers in the Schools*, 28(1), 75–85. <https://doi.org/10.1080/07380569.2011.553149>
- Kay, R. H. (2012). Exploring the use of video podcasts in education: A comprehensive review of the literature. *Computers in Human Behavior*, 28(3), 820–831. <https://doi.org/10.1016/j.chb.2012.01.011>
- Orús, C., Barlés, M. J., Belanche, D., Casaló, L., Fraj, E., & Gurrea, R. (2016). The effects of learner-generated videos for YouTube on learning outcomes and satisfaction. *Computers & Education*, 95(1), 114-121. <https://doi.org/10.1016/j.compedu.2016.01.007>
- Pratama, Y., Hartanto, R., & Kusumawardani, S. S. (2023). Validating YouTube factors affecting learning performance. In 2023 IEEE International Conference on Engineering Education (ICEdu) (pp. 1-5). IEEE.
- Rahmatika, R., Yusuf, M., & Agung, L. (2021). The Effectiveness of Youtube as an Online Learning Media. *Journal of Education Technology*, 5(1), 152–158.
- RK. Ahmadh Rifai Kariapper(2020)," IMPACT OF YOUTUBE IN HIGHER EDUCATION IN SRI LANKA";: The Mattingley Publishing Co., Inc,V (83), 29592 – 29603 [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3763459](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3763459)
- Sarah.K and Tabea.C.D (2021). Potentials and Limitations of Educational Videos on YouTube for Science Communication. *Frontiers in communication*, 5(6), doi: 10.3389/fcomm.2021.581302
- Shoufan, A. (2018). Estimating the cognitive value of YouTube's educational videos: A learning analytics approach. *Computers in Human Behavior*, 80, 329-339. <https://doi.org/10.1016/j.chb.2018.03.036>