



Descriptive and Thematic Analysis of Students' Perceptions of YouTube in Education

AUTHORS INFO

Kashif Ali Sabiri

University of Buraimi, Oman.
kashifalisabiri@hotmail.com
00968-98938527

Humayun Manzoor

University of Gujrat, Pakistan.
visiblephoenix@yahoo.com
0092-321-6235769

ARTICLE INFO

e-ISSN: 2502-6909

p-ISSN: 2502-9207

Vol. 7, No. 1, June 2022

URL: <http://dx.doi.org/10.31327/jee.v7i1.1728>

Abstract

The integration of YouTube in education has made learning innovative in the 21st century. A present study using descriptive and thematic analysis is conducted to analyze students' perceptions about the usage of YouTube for learning, their corresponding usage patterns, and associated factors motivating them to use YouTube. An online google survey is disseminated to undergraduate and master degree students and out of 80 students in total, 76 responded. Unavailability of desktop and laptop computers caused a major decline in the use of YouTube in education. Most students used YouTube for various academic activities except for video sharing. Most students found YouTube a beneficial source for improving educational activities. The findings in the last four questions confirmed that most of the students will integrate YouTube in their future learning activities. The findings can contribute in improving the use of YouTube to benefit from other online video source platforms.

Keywords: academic performance; perceptions about youtube; virtual platform, youtube.

A. Introduction

This study aimed at understanding the use and integration of YouTube in University Education in Pakistan. The study tried to understand the concepts of the higher education learners about the advantages in the use of YouTube and the related problems.

Higher education in most of the Pakistani institutions is still traditional where passive lecture at the forefront is used as a model. On the contrary, almost all higher education institutions have an array of technological tools and high-speed internet connections. Artificial intelligence, virtual reality, YouTube, computer-assisted learning, and user-generated content are some of the accessible innovations that can be used to motivate and engage the students (McConville and Lane, 2006; Kelly et al., 2009; Baxter et al., 2009; Gerdprasert et al., 2010).

YouTube has become a very common learning tool (channel) for teaching and learning. It is now the most popular free video-sharing source for user-created content (UCC) or user-generated content (UGC) (Ryu, Kim, & Lee, 2009; Shifman, 2011). Research-based studies have been conducted around the globe to understand the impact of procedural instructions through YouTube on learning, transfer, and performance within cognitive processing (Palmiter & Elkerton, 1993; Van Hooijdonk & Krahmer, 2008; Zacks & Tversky, 2003).

At the most practical level, however, both teachers and students usually desist from using procedural instruction in application to real work settings (Eiriksdottir and Catrambone, 2011). This may be because they encounter problems in understanding procedural materials designed in complicated layouts or presented in technical terms.

The use of YouTube in 21st-century learning is becoming increasingly popular among higher education learners. Most of the researchers as well as educationists are giving special attention to the use of social media such as YouTube (Avci & Askar, 2012; Ng'ambi & Lombe, 2012; Trentin, 2009). Educating nurses has been revolutionized through the inclusion of YouTube websites. The use of YouTube videos especially in nursing courses has led to an increase in engaging students, developing their critical understanding, and enhancing deep learning. Another attribute of YouTube is the ease of access and availability. (Clifton & Mann, 2010).

Almobarraz (2018) investigated the use of YouTube as a source of information in Saudi Arabia. Szeto and Cheng (2014) explored the use of ICT tools and YouTube in teaching and learning in Hong Kong. Albahlal (2019) established that YouTube could successfully improve secondary school students' speaking skills in Riyadh. June, Yaacob and Kheng (2014) proved the use of YouTube in stimulating critical thinking of the students in Malaysia. Olasina (2017) investigated the impact of YouTube videos on students' writing skills in Scottsville, Province of KwaZulu-Natal, South Africa. The current study is likely to improve the use of YouTube in the Pakistani Higher Education circle.

B. Literature Review

1. *Students' use of latest technological tools.*

Clifton & Man (2010) found out that the students these days are more familiar with online tools and the latest technological devices. Students' attention in learning decreases mainly due to the non-availability of various online tools and activities. Students can post their User Generated Content (UGC) for those learners who prefer online texts a valuable learning resource (Chintalapati & Daruri, 2016). Most of the students in the Faculty of Business and Accountancy, University of Malaya use YouTube for entertainment, seeking information, and academic learning (Moghavvemi, Sulaiman, Jaafar & Kasem, 2017).

2. *Online educational and learning resources.*

The vast availability of online educational and learning resources has accelerated innovative methods of learning. YouTube is a platform that provides learners with extensive and varied teaching content to cater their needs. Technological advances and innovations prepare individuals to develop content to meet different learning outcomes. The easily accessible online contents provide learners an opportunity to communicate their voice at the global level (Thorne, 2010). Social media like YouTube help institutions approach new generations of the students (Karvounidis, Chimos, Bersimis, & Douligeris, 2014).

3. *Online Video Material.*

YouTube is the largest online video material repository with more than one billion users (Camm, Russell, Xu & Rajappan 2018). Students prefer the use of YouTube in learning if they find it useful. This usefulness promotes continuity in the use of YouTube. Students' attitudes towards the use of YouTube impact their behaviour (Maziriri, Gapa, & Chuchu, 2020). Mullen & Wedwick (2008) argued that YouTube video sharing has the potential to enhance classroom lessons.

4. *Online video repository.*

YouTube is the largest online video material repository with more than one billion users (Camm, Russell, Xu & Rajappan 2018). Students prefer the use of YouTube in learning if they find it useful. This usefulness promotes continuity in the use of YouTube. Students' attitudes towards the use of YouTube impact their behaviour (Maziriri, Gapa, & Chuchu, 2020). Mullen & Wedwick (2008) argued that YouTube video sharing has the potential to enhance classroom lessons.

5. *Youtube helps improve learning skills.*

Moghavvemi, Sulaiman, Jaafar & Kasem, (2017) found that YouTube is an effective tool to improve the learning, but the contents of the videos should be relevant to the subject at hand. They recommended that instructors should use and integrate YouTube into teaching as it is likely to bring about inherent advantages.

YouTube videos can improve learners' speaking skills, and engage them more and more (Buzzetto-More, 2015; Greenberg & Zanetis, 2012; Revoir, 2012). Balcikanli, C. (2009) found that YouTube could improve learners' language, independence, and cultural skills. Chintalapati & Daruri, (2016) concluded that variables like User Attitude, Perceived Usefulness, Perceived Ease of Use and Behavioral Intention could help learners adopt YouTube as a Learning Resource.

6. *Youtube and personal channel(s)*

Balbay & Kilis (2017) found that the students benefited to a large extent from the videos on the playlists of a specifically designed YouTube channel and where they could easily find relevant study material.

YouTube videos help learners in different ways at students' own pace (Duffy, 2008). YouTube can help enhance learning and teaching; though it sometimes might take a lot of time to integrate course-related material (Rudenkin and Grushevskaya, 2019).

C. Methodology

1. *Research Design*

The theoretical underpinning for the research is grounded in descriptive as well as thematic analysis. It examines the participants' experiences and opinions about the use of YouTube in learning

2. *Participants/Respondents/Population and Sample*

This study is administered to Undergraduate and Graduate students in the Department of Humanities and Social Sciences at the University of Gujrat, Pakistan.

3. *Technique of Data Collection*

Google survey form is used to collect data. The researchers have collected the data by communicating the form to 80 students in undergraduate and graduate courses and out of 80, 72 participants have shared their experiences.

4. *Instruments*

The study aims to describe trends, determine individual opinions, and provide useful information to evaluate the use of YouTube in learning (Creswell, 2012; Fraenkel, Wallen, & Hyun, 2012). The data is collected at one point in time that is during the Spring 2019-20 semester. Research data form consists of various sections; i) demographic details of the participants ii) participants and Information technology iii) YouTube in Education

5. *Technique of Data Analysis*

The data collected has been analyzed using descriptive and thematic analysis. In Descriptive Statistics, a researcher describes, presents, summarizes, and organizes data (population), either through numerical calculations or graphs or tables. It is used to describe the basic features of the data in a study. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data.

The descriptive analysis presents quantitative descriptions in a manageable form. In a research study, there are lots of measures or many people on any measure. Descriptive statistics help the researcher to simplify large amounts of data sensibly. Each descriptive statistic reduces lots of data into a simpler summary.

D. Findings and Discussion

1. *Findings*

Table 1 represents demographic information of the respondents. There are 76 respondents in total: 49 females and 27 males. The highest number of respondents represent 19-20 years age group. 43 out of 49 female students and 18 out of 27 male students represent Social Sciences study group. Among females, the lowest number of respondents are enrolled in Arts and Management & Administrative Sciences whereas, in the male group, the lowest number of respondents are enrolled in Arts and Engineering & Technology. The graphical presentation supports the description in table 1.

Table 2 shows two variables: Gender and Information and Communication Technology training. The table shows a 100% success of observation showing feedback from all the respondents. The table describes data in three various frequencies: i) frequency per category, ii) relevant frequency per category, and iii) proportion per category.

Among 7 categories of ICT training, self-training from class-fellows, self-training from class-fellows online and training from non-specific regulated programmes shows the least numbers. The greatest sources of ICT training are self-training, training through specified regulated programmes and online respectively whereas ICT training from class fellows shows a percentage less than 10%. The least source of ICT training is self- training from class fellows whereas the highest source is self-training. This trend can boost peer ICT training if teachers encourage social interaction among the learners.

2. *Discussion*

1. *What are the most common uses of YouTube in academic learning?*

The students were asked to give their feedback on the use of YouTube and eight variables were used to analyze the results. Five variables analyze students' feedback about the use of YouTube in academic performance improvement, communication skills enhancement, in using academic documentaries, for writing prompt and in enhancing listening skills whereas three variables assessed students' feedback about the use of YouTube for entertainment, video-sharing and personal interest & discussions. The personal use of YouTube is less than the use of YouTube for academic performance.

Most of the students agree that YouTube is just a source of entertainment. The least number of respondents share videos. Overall analysis suggests the more the students use YouTube, the better their academic performance is likely to be.

2. What factors motivate learners to use YouTube in learning?

The motivational impact of YouTube even in education for learning is no exception. This study focuses on this theme, and it was found that this impact of YouTube is too great for words. To analyze students' feedback about the motivational impact of YouTube, four variables were used. Most of the students agreed that YouTube improved their presentation skills as well as advance study practice. YouTube is mostly believed as a good motivational source for writing the students' assignments and research papers. More than 80% of the students have found YouTube a great motivational factor in enhancing their general knowledge.

3. What are learners' perceptions about using YouTube in learning?

Since the focus of the study is to explore the students' perceptions about the inclusion and use of YouTube into education for various purposes and mainly for enhancing the learning outcomes, therefore, the researchers have used eight variables to analyze students' perceptions about the use of YouTube in education. YouTube meets the students' academic needs and improves the learning environment. Most of the students found YouTube very interesting and aligns their learning needs. Students showed a high level of confidence that YouTube videos help them in seeking help from the relevant supplementary course material. Students mostly agreed that video demonstration of various topics is more useful than PowerPoint slides.

The study finds that YouTube is a great factor to increase students' attendance. Video contents from YouTube help students learn better and this leads to a great motivation for learning, the study found. The study analyzed that most of the students reside their belief on YouTube as a great factor in enhancing their listening skills and abilities. They believe that these videos could be a great source to polish their accents and pronunciation abilities.

4. How far the personal channels of teachers and learners can enhance learning through YouTube?

There is a great concern about teachers' contribution towards students' motivation for using YouTube for learning. Most of the students were happy with the encouragement of their teachers for integrating YouTube into academic lessons but still a major percentage that is almost 31.57% of students did not get any inspiration from teachers. The research found that both students and teachers had no interest in making their channels as well as class channels. Almost 30% of the students have never tried YouTube videos to enhance their professional skills through TED talks. If the teachers and students promoted the class channel and include professional video links to this, they could use YouTube for better output.

4.1 Description of available ICT Tools.

The results describe students' ownership and use of ICT tools. Mobile (n = 62, 81.57%) and laptop (n = 47, 61.84%) show the highest frequency whereas tablet (n = 16, 21.05%) shows the least value of use and ownership. Chromebook (n = 28, 36.84%), any other item (n = 30, 39.47%) and desktop (n = 32, 42.10%) are owned in the ascending frequency.

The use and ownership of the data is reflected here in the given graph. Overall, mobile phone ownership and use shows the highest number that is 62 out of 76 respondents use it for browsing Youtube whereas tablet showing 16 out 76 is the least owned and used ICT tool with the learners. The 2nd major owned and used ICT tool is laptop showing a value of 47 out 76 ownerships.

4.2 Description of internet connection availability:

The data analysis reveals that that the largest number of internet access facility is internet at residence as a student where the number of male students is 25 (93%) out of 27 and of female students, it is 47 (96%) out of 49 students. The number of personal mobile data plan users off-campus are 20 (74%) out of 27 male students and 44 (90%) out of 49 female students.

The least number and %age of internet users are at university where 18 (67%) male students and 40 (82%) female students use university's wi-fi. The number of students who use mobile data plan on-campus and not university's wi-fi is 9 for each category of male (33%) as well as female (18%) students

4.3 Description of ICT Tools for learning.

Analysis shows frequencies and percentages split by gender for laptop, mobile, tablet, desktop and chrome-book used for learning, both on-campus and off-campus.

The number and % age of students' use of various ICT tools for learning shows a remarkable variation. Among the five ICT tools, mobile and laptop reflect the major use among the students. Mobile is the most used item with a frequency of 26 (96%) out of 27 among male students and 46 (94%) out of 49 among female students. Laptop with a number 19 (70%) among male students and with some 37 (76%) among female students is the second most used ICT tool. The use of tablet, desktop and chrome-book are the least used ICT tools. Among male students, their frequency is 2 (7%), 5 (19%) and 8 (30%) and among female students, it is 10 (20%), 14 (29%) and 29 (59%) respectively. The details give a clear indication that the access to ICT tools determines the use of technology.

4.4 Frequency Description of the use of YouTube.

The data analysis reveals the frequency description of the use of YouTube before in any course and outside the studies. 21 (78%) of male students and 34 (69%) of female students have used YouTube earlier in various study courses. Most of the female students use YouTube every day as well as at weekends whereas 23 (46%) of the females either rarely use YouTube or never and only 7 (14%) of female students use YouTube every day.

4.5 Frequency Description of the purposes of using YouTube.

The research collects respondents' feedback about the eight reasons for the use of YouTube. The data analysis describes students' uses of YouTube for various academic and personal purposes. 21 (78%) male and 42 (86%) female students use YouTube for entertainment whereas 7 (26%) male and 11 (22%) female students use YouTube for video sharing purposes. 17 (63%) female students and 27 (55%) male students use YouTube for personal interest and discussion.

21 (78%) male and 44 (90%) female students believe that the use of YouTube can improve their academic performance. When it comes to communication skills, 19 (70%) male and 38 (78%) female students agree that YouTube helps them improve these skills. 17 (63%) male and 31 (63%) female students use YouTube documentaries to enrich their learning process. Fewer among male (13 out of 27) and more (33 out of 49) female students have benefited from YouTube for honing their listening skills. Very surprisingly, only 11 (41%) out of 27 male and 19 (39%) out of 49 female students have used YouTube while working on writing assignments.

4.6 Description of benefits/advantages of YouTube for academic purposes.

Likert Scale with a 5-point response has been used to ask participants either they agree or disagree (or approve/disapprove) to multiple statements about the benefits/advantages of YouTube in education.

The responses reveal very interesting feedback. It reveals the students' level of satisfaction with YouTube. 14 (52%) out of 27 male students show strong belief whereas the other 13 (48%) show a moderate level of satisfaction that YouTube videos meet their academic needs. The responses from female students about the relevance of YouTube for academic needs are a bit different. 4 (8%) students never find YouTube videos relevant to their academic needs and 23 (47%) strongly agree while 22 (45%) moderately agree that YouTube videos meet their academic needs. 23 (85%) of male students agree, 2 (7%) disagree and another 2 (7%) neither

agree nor disagree that they find YouTube videos more effective than PPT slides. The responses from the female side are quite different.

40 (82%) students show their consent, 3 (6%) disagree and 6 (12%) reserve their opinion to the effectiveness of YouTube over slides. 22 (82%) out of 27 male students believe that YouTube videos are relevant to their course content whereas 5 (18%) have no opinion about this. 40 (81.63%) out of 49 the female students find YouTube videos relevant to their course content; 7 (14.28%) have no say about this while 2 (4.08%) of the female students don't find YouTube videos relevant to course content. 23 (85%) male students agree, 3 (11%) have no idea about this and 1 (4%) disagree that YouTube helps them in better understanding of the lessons.

38 (77.55%) of female students find YouTube useful in their lesson comprehension while 9 (18%) have no idea about this and 2 (4%) don't agree to this concept. 22 (81%) male students and 38 (78%) female students find YouTube a good source for listening practice. 3 (11%) male and 10 (20%) female students have no idea about the impact of YouTube on listening practice while 2 (8%) male and 1 (2%) female students don't find YouTube a good source for listening practice

4.7 Description of the impact of YouTube on academic performance.

Likert Scale with a 4-point response has been used to ask participants either they agree or disagree (or approve/disapprove) to multiple statements about the motivational impact of YouTube. Four variables have been used to understand students' ideas about the impact of YouTube on their academic performance. 21 (77%) out of 27 male students and 43 (87%) out of 49 female students agree that YouTube enhances their interest in the class. 5 male and 6 female students have no say about it while 1 male student does not find any interest factor in YouTube videos during class.

Concerning students' opinions about the impact of YouTube in practising presentation, 22 (81%) male students and 37 (76%) female students find the sources highly motivating. 5 (19%) male and 8 (16%) female students reserve their opinion about this impact of YouTube whereas 4 (8%) female students do not find YouTube helpful while practising presentation. 23 (86%) male and 40 (82%) female students find YouTube a great source for increasing their class participation.

3 (11%) male and 8 (16%) female students have no opinion about the impact of YouTube on increasing class participation while 1 student from each gender group does not find YouTube as a motivational factor for increasing their class participation. 25 (93%) male and 39 (80%) female students agree that YouTube helps them in improving their pronunciation and intonation abilities. 1 (4%) male and 9 (18%) female students have never experienced YouTube for this purpose whereas the same number of male and female that 1 student from each group do not agree that YouTube has a positive impact on increasing pronunciation and intonation abilities.

4.8 Description of auxiliary use of YouTube for learning.

Frequency Scale with a 5-point response has been used to ask participants how often they make use of YouTube for various academic purposes. The table above describes students' opinions about the auxiliary use of YouTube for various academic tasks. Among male students, 9 (33%) students sometimes find YouTube helpful, 6 (22%) often find it helpful, 7 (26%) always find it useful, 3 (11%) occasionally and 2 (7%) never find it helpful for preparing their lessons in advance.

Among female students, 14 (29%) students sometimes find YouTube helpful, 15 (31%) often find it helpful and the same number always find it useful and 5 (10%) never find it helpful for preparing their lessons in advance. When students are asked to give their opinion about the usefulness of YouTube to do assignment paper, 8 (30%) male and 22 (45%) female students comment always 7(26%) male and 14 (29%) female students comment often, 10

(37%) male and 8 (16%) female students comment sometimes and 1 (4%) male and 5 (10%) female students never find YouTube helpful for their assignment papers and only 1 (4%) male student comments occasionally about this use of YouTube.

10 (37%) male and 21 (43%) female students comment always, 6 (22%) male and 13 (27%) female students comment often, 9 in each category comments sometimes, 2 (7%) male and 3 (6%) female students comment occasionally, and 3 (6%) female students comment never about the use of YouTube for enhancing their general knowledge.

4.9 Description of general concepts about YouTube.

The table 5 as well as graph 4 reveal the description of YouTube channels-personal and of class-, teachers' encouragement to use YouTube and YouTube as a source to watch TED talks for professional skills development of the learners. 18 (67%) male and 34 (69%) female students agree that teachers motivate them to make the maximum use of YouTube.

When it comes to using YouTube for watching Ted Talks, only 2 (7%) male and 2 (4%) female students always watch Ted Talks through YouTube whereas 18 (67%) male and 31 (63%) students sometimes and 7(26%) male and 16 (33%) female students never have this approach to YouTube. Only 5 (19%) male and 7 (14%) female students have accessed a class channel while only 7 (26%) male and 8(16%) have created a personal channel on YouTube.

Thematic analysis:

Thematic analysis, a very flexible and popular method of qualitative data analysis, has been used in this study to support descriptive analysis and to explain the data collected from a different perspective. This method of analysis requires the researcher to identify and organize data into meanings/themes which results in making sense of shared experiences. The study conducted has analyzed themes across demographic variables to answer the research questions. The thematic analysis in this study found the commonalities among various themes. The researchers had established four questions as the themes of their study. The data collected was analyzed setting the variables with themes.

Research implications and limitations:

Many researchers (Martin, 2016; McGowan, Hanna, & Anderson, 2016; Ou, Goel, Joyner, & Haynes, 2016; Vieira, Lopes, & Soares, 2014) have studied to establish that YouTube videos have a great impact in learning. This is the reason that Jung & Lee (2015) and Lee & Lehto (2013) agreed that YouTube is an educational technology that is acceptable. Many similar videos about the same topic (Rodrigues, Benevenuto, Almeida, Almeida, & Gonçalves, 2010; Benevenuto et al., 2010) pose serious challenges to the educators to choose the most appropriate ones and it also sometimes becomes more time-consuming. Though YouTube web-developers are updating plenty of filters and suggestions regularly yet the learners find it a great risk to their time management and course content.

This research has certain limitations. The study didn't focus any specific type of educational videos, the length of the videos and the inclusion of more subjects especially the natural sciences. The behaviour of the students from varying faculties is likely to produce more varying and concrete results but the researchers haven't surveyed any students from natural sciences as it was likely to produce better comparative analysis. The researcher could not ask the students about their intentions to include YouTube videos in their future studies.

Table 1.
Description of Demographic Information.

Gender & Subjects	17-18 years	19-20 years	21-25 years	Grand Total
Female	5	32	12	49
Arts		1		1
Computing & Information Technology	1	1		2
Management & Administrative Sciences		1		1
Sciences		2		2
Social Sciences	4	27	12	43
Male	5	16	6	27
Arts		1		1
Computing & Information Technology	2	4	1	7
Engineering & Technology		1		1
Social Sciences	3	10	5	18
Grand Total	10	48	18	76

Table 2:
Description of ICT Training

Variable	Observations	No. of Categories	Categories	Frequency per category	Rel. frequency per category (%)	Proportion per category
Gender	76.000	2.000	Female	49.000	64.474	0.645
			Male	27.000	35.526	0.355
ICT Training	76.000	7.000	From class fellows	7.000	9.211	0.092
			Non-specific regulated programmes	3.000	3.947	0.039
			Online	14.000	18.421	0.184
			Self-training	34.000	44.737	0.447
			Self-training, From class fellows	1.000	1.316	0.013
			Self-training, From class fellows, Online	2.000	2.632	0.026
			Specific regulated programmes	15.000	19.737	0.197

Table 3:
Description of the impact of YouTube on academic performance.

Variable	Male	Female
Make the class more interesting		
Disagree	1 (4%)	0 (0%)
Neither Agree nor Disagree	5 (19%)	6 (12%)
Strongly Agree	9 (33%)	12 (24%)
Agree	12 (44%)	31 (63%)
Motivate to practise presenting		
Disagree	0 (0%)	4 (8%)
Neither Agree nor Disagree	5 (19%)	8 (16%)
Strongly Agree	12 (44%)	17 (35%)
Agree	10 (37%)	20 (41%)
Increase class participation		
Disagree	1 (4%)	1 (2%)
Neither Agree nor Disagree	3 (11%)	8 (16%)
Strongly Agree	8 (30%)	15 (31%)
Agree	15 (56%)	25 (51%)
Improve pronunciation and intonation		
Disagree	1 (4%)	1 (2%)
Neither Agree nor Disagree	1 (4%)	9 (18%)
Strongly Agree	11 (41%)	19 (39%)
Agree	14 (52%)	20 (41%)

Table 4:
Description of auxiliary use of YouTube for learning.

To prepare for lesson in advance		
Never	2 (7%)	5 (10%)
Occasionally	3 (11%)	0 (0%)
Sometimes	9 (33%)	14 (29%)
Often	6 (22%)	15 (31%)
Always	7 (26%)	15 (31%)
To do my assignment paper		
Never	1 (4%)	5 (10%)
Occasionally	1 (4%)	0 (0%)
Sometimes	10 (37%)	8 (16%)
Often	7 (26%)	14 (29%)
Always	8 (30%)	22 (45%)
To enhance general knowledge		
Never	0 (0%)	3 (6%)
Occasionally	2 (7%)	3 (6%)
Sometimes	9 (33%)	9 (18%)
Often	6 (22%)	13 (27%)
Always	10 (37%)	21 (43%)

Table 5:
Description of general concepts about YouTubes.

Variable	Male	Female
Teachers encourage integration		
Yes	18 (67%)	34 (69%)
No	9 (33%)	15 (31%)
To watch TED talks		
Always	2 (7%)	2 (4%)
Sometimes	18 (67%)	31 (63%)
Never	7 (26%)	16 (33%)
Class channel		
Yes	5 (19%)	7 (14%)
No	22 (81%)	42 (86%)
Personal channel		
Yes	7 (26%)	8 (16%)
No	20 (74%)	41 (84%)

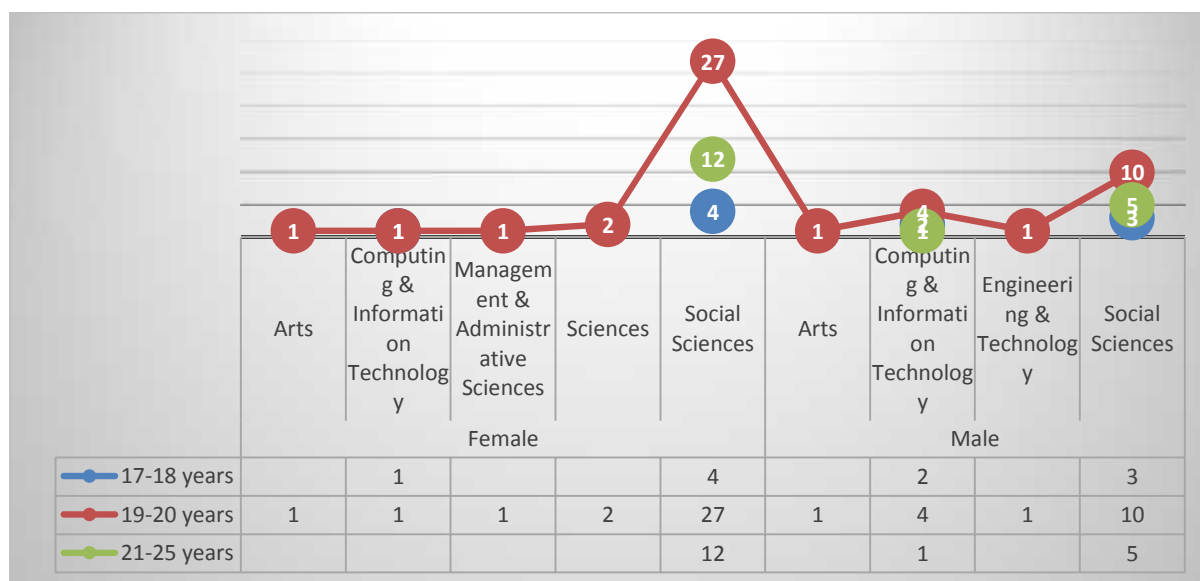


Figure 1: Description of demographic information.

As shown in graph 1, the highest value of female respondents is from 19-20 years age group, and they are 27 out of 49 representing Social Sciences subject. Among male respondents, the highest number of respondents is also the same age group and same subject. 21-25 years age group, both male and female, represent only one subject that is Social Sciences, and they show the 2nd highest respondents in the graph.

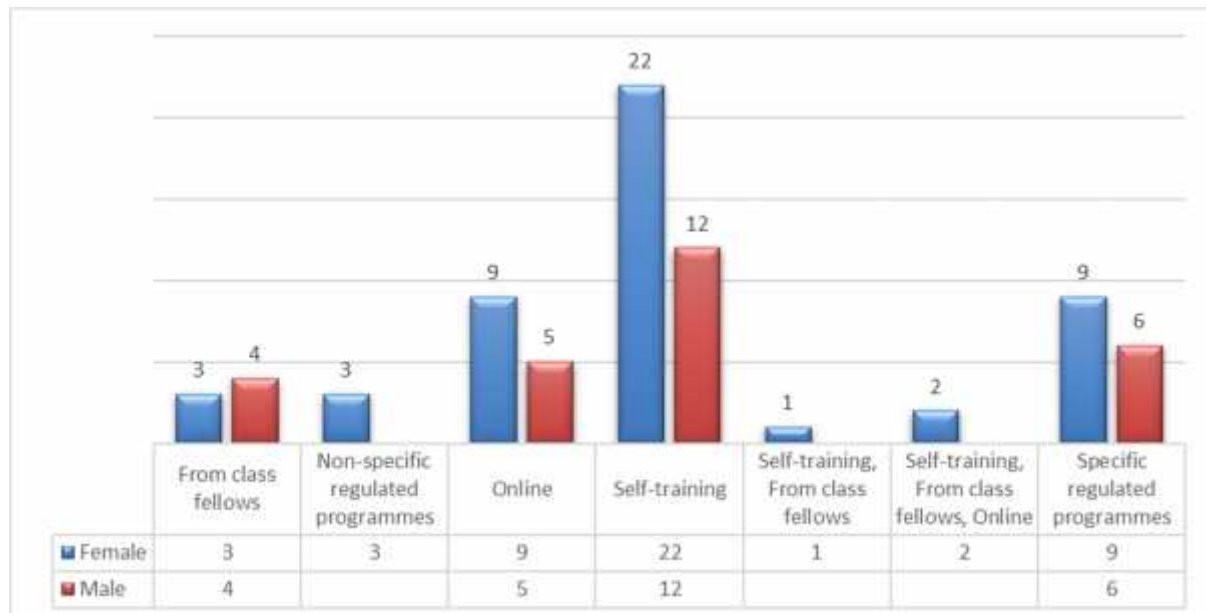
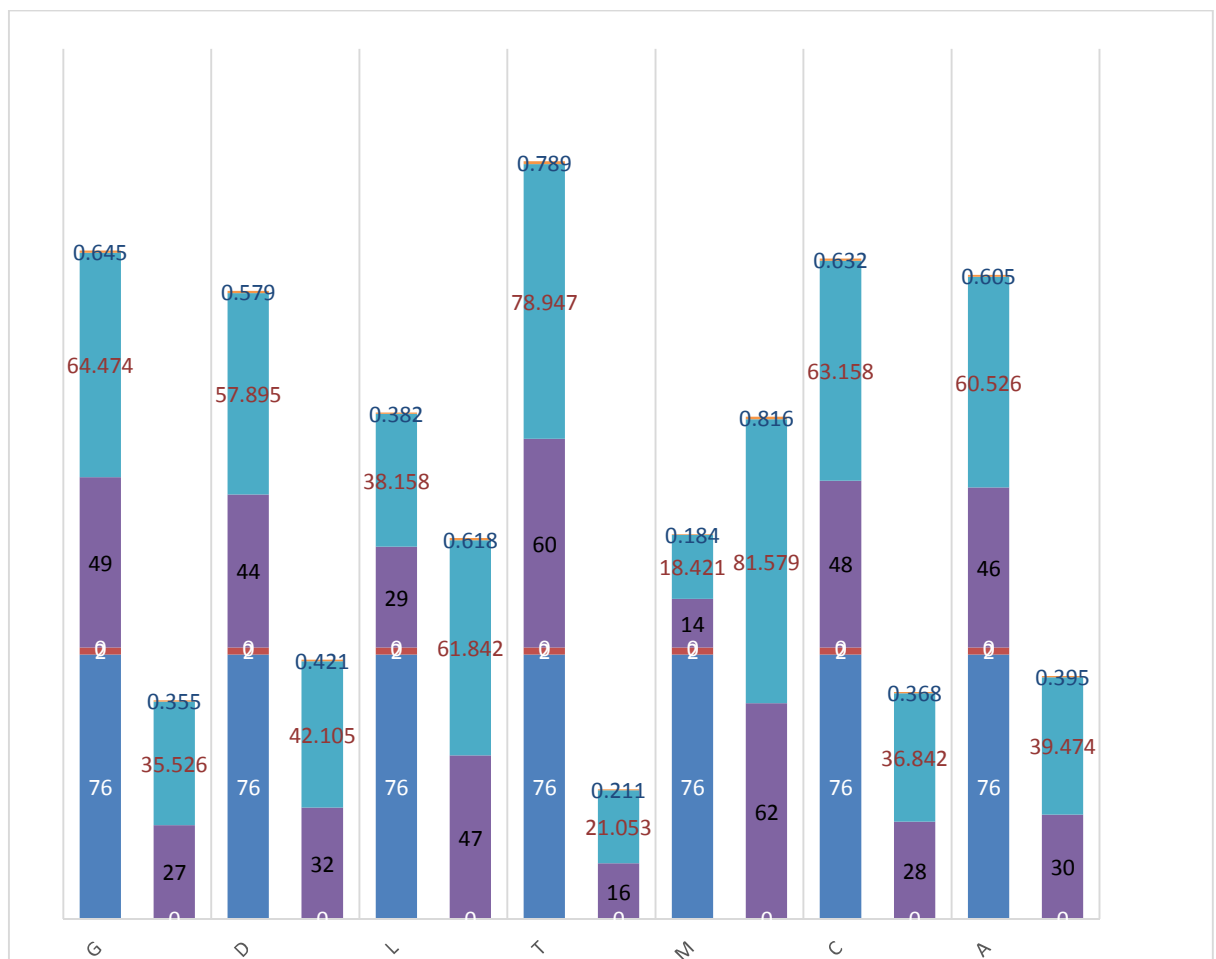


Figure 2: Description of ICT Training

The graph 2 reveals the trends for ICT training prevalent among the learners. 22 females out of 49 and 12 males out of 27 rely on self-training to learn the use and employability of YouTube in education. Very few numbers, that is 1 and only female out of 76 recourses to the class fellows for ICT training. Learning for specific regulated programmes and online use of YouTube show same value that is 9 each. Surprisingly, no male learner among 76 is using ICT for learning non-specific regulated programmes, self-training, and self-training from class fellows or online



Graph 3: representing ICT Ownership.

The use and ownership of the data is reflected here in the given graph. Overall, mobile phone ownership and use shows the highest number that is 62 out of 76 respondents use it for

browsing Youtube whereas tablet showing 16 out 76 is the least owned and used ICT tool with the learners. The 2nd major owned and sued ICT toll is laptop showing a value of 47 out 76 ownerships.



Graph 4:
Description of general concepts about YouTubes.

E. Conclusion

Online video sources have become inevitable for learning and teaching. Continued research is being conducted to analyze as well as to measure the impact of online videos. Video integrated learning and teaching processes can improve and polish the academic skills of both learners and teachers. Students at the university level are very much confident that YouTube can enhance their listening, writing, speaking and presentation skills.

YouTube videos are becoming very popular among learners. Most of the higher education institutions in Pakistan are developing curriculum which incorporates online sources and especially video sources. Free access to technology tools as well as the internet both at home and institution can improve technology-integrated teaching and learning. Teachers are a pivotal factor in improving students' motivation and interest.

Online sources motivate students for more class participation and have successfully increased class attendance. Students enjoy the concept of learning on their own-the the successful concept of the flipped classroom. Institutions should devise policies to create online platforms for every class as well as every subject especially at the higher education level.

Acknowledgement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. The researchers are grateful to the management of the Gujrat University for granting consent to conduct research at the university.

Ethics

This study complies with the university policy on Human Ethical Practice in Research. No data related to the students' names and personal information is collected/used, while the data

is aggregated for the analyses. Students are informed of the details of the study in advance, and participation is voluntary.

F. References

- Albahlal, F. S. (2019). The impact of YouTube on improving secondary school students' speaking skills: English language teachers' perspectives. *Journal of Applied Linguistics and Language Research*, 6(2), 1–17
- Almobarraz, A. (2018). Utilization of YouTube as an information resource to support university courses. *Electronic Library*, 36(1), 71–81. <https://doi.org/10.1108/EL-04-2016-0087>
- Avci, U., & Askar, P. (2012). The comparison of the opinions of the university students on the usage of blog and wiki for their courses. *Educational Technology and Society*, 15(2), 194–205
- Bagarukayo, E., Ssentamu, P., Mayisela, T., & Brown, C. (2016). Activity Theory as a lens to understand how Facebook develops knowledge application skills. *International Journal of Education and Development Using Information and Communication Technology*, 12(3), 128–140
- Balbay, S., & Kilis, S. (2017). Students' Perceptions of the use of a YouTube channel specifically designed for an Academic Speaking Skills Course. *Eurasian Journal of Applied Linguistics*, 3(2), 235–251. <https://doi.org/10.32601/ejal.461003>
- Balcikanli, C. (2009). Long Live, YouTube: L2 Stories about YouTube in Language Learning. *E-Proceedings of the International Online Language Conference (IOLC)*, 91–96. Retrieved from <http://login.ezproxy1.lib.asu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ufh&AN=49719677&site=ehost-live>
- Baxter, Susan & Brookes, Clair & Bianchi, Karen & Rashid, Khadeeja & Hay, Fiona. (2009). Speech and language therapists and teachers working together: Exploring the issues. *Child Language Teaching & Therapy - CHILD LANG TEACH THER.* 25. 215-234. 10.1177/0265659009102984
- Baxter, Susan & Brookes, Clair & Bianchi, Karen & Rashid, Khadeeja & Hay, Fiona. (2009). Speech and language therapists and teachers working together: Exploring the issues. *Child Language Teaching & Therapy - CHILD LANG TEACH THER.* 25. 215-234. 10.1177/0265659009102984
- Beneventuo, F., Rodrigues, T., Almeida, V., Almeida, J. M., Gonçalves, M., & Ross, K. (2010). Video pollution on the Web. *First Monday*, 15, 1. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=lxh&AN=59526196&lang=hr&site=ehost-live>
- Buzzetto-More, N. (2015). Student Attitudes Towards The Integration Of YouTube In Online, Hybrid, And Web-Assisted Courses: An Examination Of The Impact Of Course Modality On Perception. *MERLOT Journal of Online Learning and Teaching*, 11(1), 55–73.
- Camm, C. F., Russell, E., Ji Xu, A., & Rajappan, K. (2018). Does YouTube provide high-quality resources for patient education on atrial fibrillation ablation? *International Journal of Cardiology*, 272, 189–193. <https://doi.org/10.1016/j.ijcard.2018.08.066>
- Chintalapati, N., & Daruri, V. S. K. (2017). Examining the use of YouTube as a Learning Resource in higher education: Scale development and validation of TAM model. *Telematics and Informatics*, 34(6), 853–860. <https://doi.org/10.1016/j.tele.2016.08.008>
- Chintalapati, N., & Daruri, V. S. K. (2017). Examining the use of YouTube as a Learning Resource in higher education: Scale development and validation of TAM model. *Telematics and Informatics*, 34(6), 853–860. <https://doi.org/10.1016/j.tele.2016.08.008>
- Clifton, A., & Mann, C. (2011). Can YouTube enhance student nurse learning? *Nurse Education Today*, 31(4), 311–313. <https://doi.org/10.1016/j.nedt.2010.10.004>
- Clifton, A., & Mann, C. (2011). Can YouTube enhance student nurse learning? *Nurse Education Today*, 31(4), 311–313. <https://doi.org/10.1016/j.nedt.2010.10.004>
- Davis, F.D., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Q.* 13, 319.
- Dhume, S.M., Pattanshetti, M.Y., Kamble, S.S., Prasad, T., 2012. Adoption of social media by business education students: Application of Technology Acceptance Model (TAM). In: 2012 IEEE International Conference on Technology Enhanced Education, ICTEE 2012.

- National Institute of Industrial Engineering (NITIE), Mumbai, India. <http://dx.doi.org/10.1109/ICTEE.2012.6208609>.
- Duffy, P. (2007). Engaging the YouTube Google-eyed generation: Strategies for using web 2.0 in teaching and learning. In ECEL 2007: 6th European Conference on e-Learning (pp. 173–182). Academic Conferences Limited.
- Eiriksdottir, E., & Catrambone, R. (2011). Procedural instructions, principles, and examples: how to structure instructions for procedural tasks to enhance performance, learning, and transfer. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 53(6), 749–770
- Gerdprasert, Sailom & Pruksacheva, Tassanee & Panijpan, Bhinyo & Ruenwongsa, Pintip. (2010). An interactive web-based learning unit to facilitate and improve intrapartum nursing care of nursing students. *Nurse education today*. 31. 531-5. [10.1016/j.nedt.2010.10.008](https://doi.org/10.1016/j.nedt.2010.10.008)
- Greenberg, A., & Zanetis, J. (2012). The impact of broadcast and streaming video in education. Report Commissioned by Cisco Systems Inc. to Wainhouse Research L.L.C. Retrieved from <http://www.cisco.com/web/strategy/docs/education/ciscovideowp.p>.
- Jackman, W. M., & Roberts, P. (2014). Students' Perspectives on YouTube Video Usage as an E-Resource in the University Classroom. *Journal of Educational Technology Systems*, 42(3), 273–296. <https://doi.org/10.2190/et.42.3.f>
- June, S., Yaacob, A., & Kheng, Y. K. (2014). Assessing the use of youtube videos and interactive activities as a critical thinking stimulator for tertiary students: An action research. *International Education Studies*, 7(8), 56–67. <https://doi.org/10.5539/ies.v7n8p56>
- Jung, I., & Lee, Y. (2015). YouTube acceptance by university educators and students: A cross-cultural perspective. *Innovations in Education and Teaching International*, 52(3), 243–253. <https://doi.org/10.1080/14703297.2013.805986>
- Karvounidis, T., Chimos, K., Bersimis, S., & Douligeris, C. (2014). Evaluating Web 2.0 technologies in higher education using students' perceptions and performance. *Journal of Computer Assisted Learning*, 30(6), 577–596. <https://doi.org/10.1111/jcal.12069>
- Khan, M. L. (2017). Social media engagement: What motivates user participation and consumption on YouTube? *Computers in Human Behavior*, 66, 236–247. <https://doi.org/10.1016/j.chb.2016.09.024>
- Lee, D. Y., & Lehto, M. R. (2013). User acceptance of YouTube for procedural learning: An extension of the Technology Acceptance Model. *Computers and Education*, 61(1), 193–208. <https://doi.org/10.1016/j.compedu.2012.10.001>
- Martin, P. A. (2016). Tutorial video use by senior undergraduate electrical engineering students. *Australasian Journal of Engineering Education*, 21(1), 39–47. <https://doi.org/10.1080/22054952.2016.1259027>
- Maziriri, E. T., Gapa, P., & Chuchu, T. (2020). Student Perceptions Towards the use of YouTube as An Educational Tool for Learning and Tutorials. *International Journal of Instruction*, 13(2), 119–138. <https://doi.org/10.29333/iji.2020.1329a>
- McConville, Sally & Lane, Andrew. (2006). Using On-Line Video Clips to Enhance Self-Efficacy toward Dealing with Difficult Situations among Nursing Students. *Nurse education today*. 26. 200-8. [10.1016/j.nedt.2005.09.024](https://doi.org/10.1016/j.nedt.2005.09.024)
- McGowan, A., Hanna, P., & Anderson, N. (2016). Teaching programming - Understanding lecture capture youtube analytics. In Annual Conference on Innovation and Technology in Computer Science Education, ITiCSE (Vol. 11-13-July-2016, pp. 35–40). Association for Computing Machinery. <https://doi.org/10.1145/2899415.2899421>
- Moghavvemi, S., Sulaiman, A., Jaafar, N. I., & Kasem, N. (2018). Social media as a complementary learning tool for teaching and learning: The case of youtube. *International Journal of Management Education*, 16(1), 37–42. <https://doi.org/10.1016/j.ijme.2017.12.001>
- Mullen, R., & Wedwick, L. (2008). Avoiding the Digital Abyss: Getting Started in the Classroom with YouTube, Digital Stories, and Blogs. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 82(2), 66–69. <https://doi.org/10.3200/tchs.82.2.66-69>
- Ng'ambi, D., & Lombe, A. (2012). Using podcasting to facilitate student learning: A constructivist perspective. *Educational Technology & Society*, 15(4), 181–192
- Olasina, G. (2017). An evaluation of educational values of YouTube videos for academic writing. *The African Journal of Information Systems*, 9(4), 2.
- Ou, C., Goel, A. K., Joyner, D. A., & Haynes, D. F. (2016). Designing videos with pedagogical strategies: Online students' perceptions of their effectiveness. In L@S 2016 -

- Proceedings of the 3rd 2016 ACM Conference on Learning at Scale (pp. 141–144). Association for Computing Machinery, Inc. <https://doi.org/10.1145/2876034.2893391>
- Palmiter, S., & Elkerton, J. (1993). Animated demonstrations for learning procedural computer-based tasks. *Human-Computer Interaction*, 8(3), 193–216
- Rodrigues, T., Benevenuto, F., Almeida, V., Almeida, J., & Gonçalves, M. (2010). Equal but different: A contextual analysis of duplicated videos on YouTube. *Journal of the Brazilian Computer Society*, 16(3), 201–214. <https://doi.org/10.1007/s13173-010-0019-x>
- Rudinkin, D., & Grushevskaya, V. (2019). Youtube as an instrument of learning in higher education: Opportunities and challenges. In *Proceedings of the European Conference on e-Learning, ECEL* (Vol. 2019-November, pp. 684–686). Academic Conferences Limited. <https://doi.org/10.34190/EEL.19.039>
- Rudinkin, D., & Grushevskaya, V. (2019). YouTube as an instrument of learning in higher education: Opportunities and challenges. *Kidmore End: Academic Conferences International Limited*. <http://dx.doi.org.libproxy.tuni.fi/10.34190/EEL.19.039>
- Ryu, M.-H., Kim, S., & Lee, E. (2009). Understanding the factors affecting online elderly user's participation in video UCC services. *Computers in Human Behavior*, 25(3), 619–632
- Saurabh, S., Sairam, A.S., 2013. Professors – The new YouTube stars: Education through Web 2.0 and social network. *Int. J. Web Based Communities* 9, 212–232. <http://dx.doi.org/10.1504/IJWBC.2013.053245>.
- Shifman, L. (2011). An anatomy of a YouTube meme. *New Media & Society*, <http://dx.doi.org/10.1177/1461444811412160>
- Siddiqui, A, (March 1, 2019). A Critical Look at YouTube Videos: Causing Behavioral Change Among Children. Available at <http://doi.org/10.2139/ssrn.3453417>
- Szeto, E., & Cheng, A. Y. N. (2014). Exploring the Usage of ICT and YouTube for Teaching: A Study of Pre-service Teachers in Hong Kong. *Asia-Pacific Education Researcher*, 23(1), 53–59. <https://doi.org/10.1007/s40299-013-0084-y>
- Thorne, S. L. (2010). The intercultural turn and language learning in the crucible of new media. In F. Helm & S. Guth (eds.), *Telecollaboration 2.0 for Language and Intercultural Learning* (pp. 139–164). Bern: Peter Lang
- Topps, D., Helmer, J., Ellaway, R., 2013. YouTube as a platform for publishing clinical skills training videos. *Acad. Med.* 88, 192–197. <http://dx.doi.org/10.1097/ACM.0b013e31827c5352>.
- Van Hooijdonk, C., & Krahmer, E. (2008). Information modalities for procedural instructions: the influence of text, pictures, and film clips on learning and executing RSI exercises. *IEEE Transactions on Professional Communication*, 51(2), 50–62
- Vieira, I., Lopes, A. P., & Soares, F. (2014). The Potential Benefits of Using Videos in Higher Education. In *EDULEARN14 CD Proceedings*.
- Zacks, J. M., & Tversky, B. (2003). Structuring information interfaces for procedural learning. *Journal of Experimental Psychology: Applied*, 9(2), 88–100