Content Analysis of Top View YouTube Videos on Open Educational Resources

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ABSTRACT
YouTube is a Web 2.0 platform of distributed video sharing, widely used by students, universities and scholars. This article looks into the Content Analysis of Top Viewed Youtube Videos on Open Educational Resources. The focus of analysis is on the sample of videos each scholar uploaded and categorized as "Open Educational Resources" in YouTube. To find out subject orientation of the videos such as business, entertainment, education etc. The data collected from the content analysis allows to understand what content is being shared and with what approach. All the videos address similar concepts and ideas regarding the integration and use of Open Educational Resources and also explain growth of YouTube Videos related to Open Educational Resources.
KEYWORDS: *YouTube, Open Educational Resources, Content Analysis, Web 2.0*

I.   INTRODUCTION

In its simplest form, the concept of open educational resources describes any educational resources (including curriculum maps, course materials, text-books, streaming videos, multimedia applications, podcasts and any other materials that have been designed for use in teaching and learning) that are openly available for use by educators and students, without an accompanying need to pay royalties or license fees. Open educational resources (OER),The term was first coined at UNESCO's 2002 Forum on open courseware and designates "teaching, learning , and research materials in any medium, digital or otherwise that reside in the public domain or have been released under an open license that permits no-cost access , use , adaption and redistribution by others with no or limited restrictions. The rapid growth of OER provides new opportunities for teaching and learning at the Web Platform.

YouTube is a Web 2.0 platform has enabled new levels of interaction and communication between users for sharing and creating content online. YouTube was creating in 2005, as a free public access Web platform allowing people to easily upload, view, share, comments, rates, and explore video clips. Now a day you tube is ranked as 2nd most popular website with hundreds of millions of users around the world. All users have the opportunity to freely upload and share videos on you tube uploading them proper categories: Entertainment, News & polities, film animation, Gaming, Education etc.

OPEN EDUCATIONAL RESOURCES (OER)
The new definition explicitly states that OER can include both digital and non-digital resources. Also, it lists several types of use that OER permit, inspired by 5R activities of OER. 5R activities/permissions were proposed by David Wiley, which include:-

•   Retain - the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)

•   Reuse - the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)

•   Revise - the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)

•   Remix - the right to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)

•   Redistribute - the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend)

Users of OER are allowed to engage in any of these 5R activities, permitted by the use of an open license. The Organization for Economic Co-operation and Development (OECD) defines OER as: "digitized materials offered freely and openly for educators, students, and self-learners to use and reuse for teaching, learning, and research. OER includes learning content, software tools to develop, use, and distribute content, and

implementation resources such as open licenses". The Wiki Educator project suggests that OER refers "to educational resources (lesson plans, quizzes, syllabi, instructional modules, simulations, etc.) that are freely available for use, reuse, adaptation, and sharing'.

What Are The Best Ways To Build Capacity In Oer?
The skills required for institutions to harness OER effectively are many and varied. A fuller list is provided in Appendix Nine, but they include the following:-
•	Expertise in advocacy and promotion of OER as a vehicle for improving the quality of learning and teaching in education.
•	Legal expertise relating to content licensing.
•	Expertise in developing and explaining business models that justify, to institutions individual educators, and other creators of educational content (including publishers), the use of open licensing.
•	Programmed, course and materials design and development expertise.
•	Technical expertise.
•	Expertise in managing networks/consortia of people and institutions to work cooperatively on various teaching and learning improvement projects.
•	Monitoring and evaluation expertise.
•	Expertise in curetting and sharing OER effectively.
•	Communication and research skills to be able to share information about OER.

Capacity building should also focus on the people and institutions required to enable effective use of OER. This would involve:
•	Raising awareness of the potential of OER and the requirements for successful use.
•	Supporting policy-makers and heads of institutions to understand the key elements necessary to create supportive policy environments, develop materials, use technology, and conduct research.
•	Identifying best-practice examples of use of OER and facilitating institutional visits, so that participants have an opportunity not only to observe effective use of OER in practice but also to start developing support networks and communities of practice.

How Can I Share My Oer With Others?
Once a resource has been developed and an open license has been selected (see Appendix Onefor information on the various options), the resource will need to be stored in an online repository in order for others to access it. There are various options with regard to where these resources might reside:-
•	**Use the Institutional repository:-** Many organizations, and especially universities,are setting up their own collections and making them available online as OER or OCW. If the writer or developer works for such an institution, the expectation will be that OER developed under the auspices of that institution should reside within their repository. Seek guidance from the repository administrator.
•	**Build the OER online:** It is also possible to build a resource online. A few sites encourage development of OER within their online environments. They can then automate processes such as acquiring a Creative Commons license and adding the resource to the database. One such example is Conations (http://cnx.org), which allows teams to develop modules of learning on their site. Users open an account, develop the materials online, and then publish them once they are satisfied. Wiki Educator (http://wikieducator.org) uses a similar method to allow educators to develop teaching materials collaboratively online.
•	**Exploit social networks.** The world of social networking has also opened new possibilities for publishing OER online. A site such as Flickr (www.flickr.com) allows its users to publish photographic materials with Creative Commons licenses, while YouTube (www.youtube.com) allows the same for digital video materials. Networks like Twitter and Facebook can be used to spread awareness of the materials posted on the Internet by sharing the links.

Content Analysis
Content analysis is the study of recorded human communication analyzing the existence and frequency of concepts in human communication. In this paper I have analyzed of the content of top viewed you tube videos on "Open Educational Resources". The contents reanalyzed to know whether videos uploaded on you tube provide facts or real information or not.

II. OBJECTIVES

The prime objective of the proposed research work is to investigate and make an assessment of content of the videos on "Open educational resources" uploaded in YouTube. Some other understated objectives are listed below:-

I. To find out the maximum viewed and liked videos and to rank them in order.
II. To identify the content of the videos that , Whether they are in support of Open educational resources or against it.
III. To find out subject orientation of the videos such as business,entertainment ,education etc
IV. To find out the growth of YouTube Videos related to Open Educational Resources.
V. To examine different license of YouTube videos related to open educational resources.
VI. To identify top twenty views, like and comment videos.
VII. To find out the characteristics of YouTube videos related to open educational resources.

Statement of the problem

I. In the background of the observations made and in the light of the literature review some of the research question marked up.
II. What are the characteristics (i.e. format, source) of YouTube videos about open educational resources?
III. What content about OER is presented in YouTube videos?
IV. What types of YouTube videos about OER are viewed most often by audiences?
V. What are the characteristics of speakers appearing in YouTube videos about OER?
VI. Do YouTube videos about OER include mobilizing information (i.e. Website Uniform Resource Locators [URLs], Physical addresses and phone numbers)?
VII. What is the valence of comments (positive, negative or neutral) on YouTube videos about OER?
VIII. How prevalent is uncertainty in YouTube comments on videos about OER?
IX. What factors seem to motivate users to reply to comments under videos regarding OER on YouTube?
X. What types of sources is commenter using to support their comments regarding OER?

XI. METHODOLOGY

Content analysis pertaining to an act of explaining the source materials of content analyzing them and to identify variability of the content based on designated parameters. The process of such work could be termed as descriptive research.

In the present work, the investigator has initially made an extensive search online on "YouTube" database to find out the sample videos on "Open educational resources" with the following limitations. The investigator has viewed all these selected videos, made a checklist of certain characteristics, collected the necessary data and finally filled those checklists for subsequent data analysis. The characteristics under taken for assessment can be listed as follows:

➢ Serial Number
➢ Title of the videos
➢ Date of creation
➢ Year
➢ Likes

➢ No. of Views
➢ Video Duration
➢ Creator
➢ Affiliation
➢ Country

➢ Dislikes
➢ Comments

➢ Content
➢ URL

Scope and Limitation

The present study how ever has the following limitations:-

• Only those videos found under the keyword "open educational resources".
• Only top 110 videos on higher counts of viewership are taken for analysis.
• Data are collected from YouTube web platform.
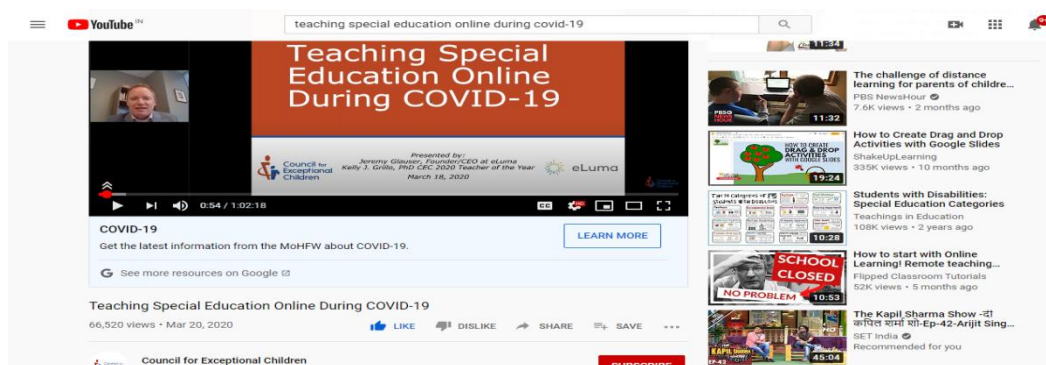
III.   REVIEW OF LITERATURE

Lambodara Parabhoi, PremChand (2018) "Content Analysis of YouTube Videos Related to Drupal, Joomla and WordPress". YouTube is a popular video sharing site used by many people in world wide. The current study is to examine the YouTube videos related to Drupal, Joomla and Word Press which are content management systems (CMS).YouTube site is freely accessible by every category of peoples and used this site for his/her own needs. YouTube is playing an important role for promoting videos related to CMS and other library software's. The current study is based on content analysis of YouTube videos related to three content management software's Drupal, Joomla and WordPress. This study also informs most liked, commented, and viewed videos.

Weizhou Tang , Kate Olscamp, Seul Ki Choi, Daniela B Friedman (2017) "Alzheimer's Disease in Social Media: Content Analysis of YouTube Videos".This article describe, American country 55 Million people are living with Alzheimer's Disease (AD) in 2017. YouTube is a popular platform for disseminating health information.This study aims to examine video characteristics,content,speaker characteristics and mobilizing information of YouTube videos focoused on AD.

Erica Bass-Flimmons, Dr. Wanjira Kinuthia (2011) "Mobile Learning in Ghana: A content analysis of YouTube videos promoting teacher development opportunities within Higher Education". This paper looks at how YouTube videos developed by higher education institutions in Ghana feature participatory approaches to problem solving while facilitating images of educators acceptance of mobile learning.

L.M. Huang (2019) "Stand to stop: a content analysis of YouTube videos about cyberbullying in schools and library-based interventions".Cyberbullying or Cyber harassment is a form of bullying or harassment using electronic means – Cyberbullying and Cyber harassment are also known as Online bullying. This study aims to: 1) examine how cyberbullying in school settings is addressed in YouTube videos, and 2) identify the core messages of the videos to illuminate the current status of, and to propose a more impactful role for school librarians, in addressing cyberbullying. This study used YouTube videos to investigate how cyberbullying was presented, and how school librarians were involved in this issue. Both quantitative and qualitative content analysis was applied to examine the YouTube sample videos.

IV.   DATA ANALYSIS AND INTERPRETATION

In the light of the literature reviewed and data collected a detailed tabulation and an in-depth analysis has been made in the present chapter. As per the scope this investigation , top 110 videos on the theme "content analysis of youtube videos on open educational resources" (as described in the methodology part) were viewed and pertinent data were collection and entered into the check list. The tables are created with reference to the characteristics taken into consideration in the checklist developed for the collection of secondary data from the YouTube site.The following data as shown in the screenshot below has been collected for analysis of these videos.
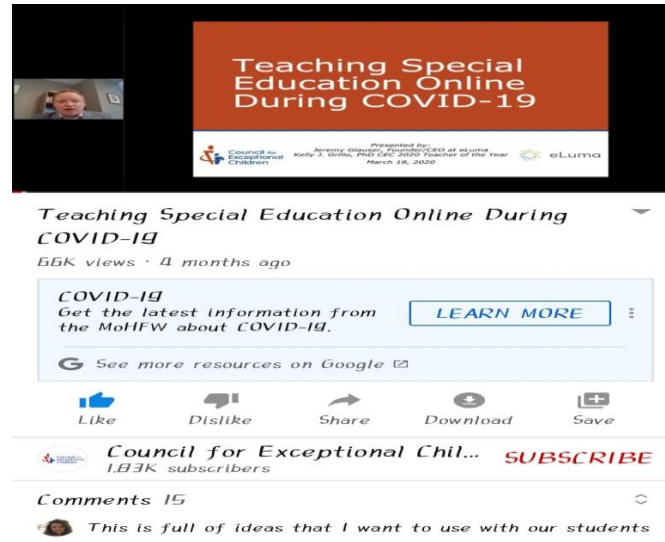
4.1 Growth of Videos on 'OER' in YouTube

Deposit of 'OER' Videos on YouTube

Deposit period of videos (18th Apr 2008 – 19th Apr 2020)	No. of videos uploaded
January	5
February	7
March	8
April	9
May	14
June	14
July	8
August	2
September	12
October	11
November	10
December	10
	Total-110

The above table is a list of month wise distribution of the videos those are uploaded in the selected time period that is 18th Apr 2008 to 19th Apr 2020. The time consists of 143 months. There are tentatively 16900 videos uploaded in the total during this period, but for a better work analysis top 110 were taken into consideration according to the number of views they received. During the course of analysis it was found that a maximum of 14 videos with high view count were uploaded in the May and June month. A graphical representation has been provided in figure for a clear understanding.

Deposit of 'OER' Videos on YouTube
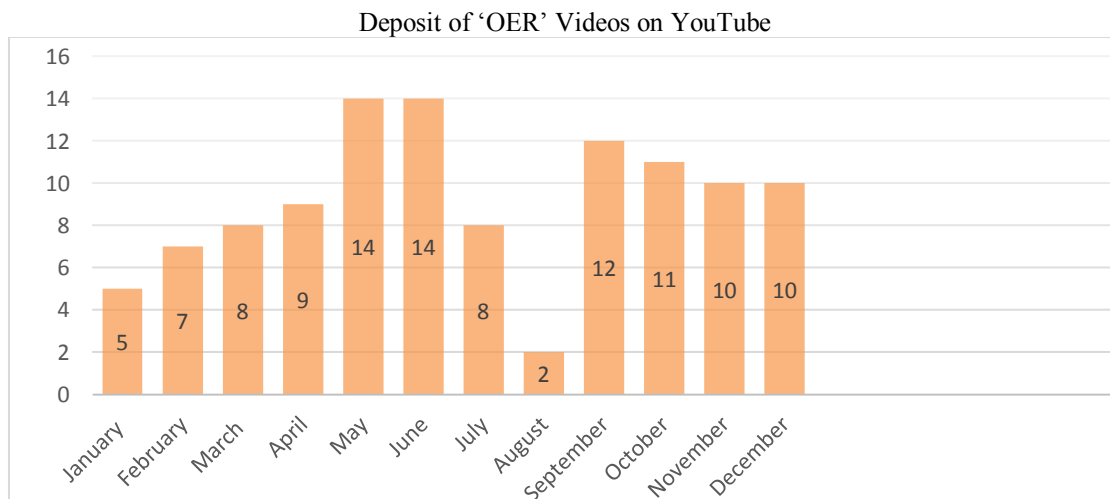
4.2. Distribution of videos according to the no.of views

"OER" Videos by no.of views

No. of Views	No. of Videos
1 - 5K	99
6K - 10K	6
11K – 15K	0
16K – 20K	1
21K – 25K	1
26K - 30K	0
MoreThan 30K	3
	Total- 110

As a part of content analysis of YouTube videos in the present study, it is quite essential to find out the popularity of YouTube videos , which can be measured only by calculating the no. of views the particular video has received. It becomes very vital for the researcher to segregate them in terms of number of views. Thus in table, the videos are categorised according to the views , such as 1-5000 , 6000 – 10000 and so on till 25000 – 30000 and the last category includes views received above 30000.In this context it would be important to mention that the highest number of views received by any video related to OER is 47,328 in numbers in this particular time period. However as per the tabulation, the highest number that is 99 of videos comes under the first group that has been viewed in between 1 to 5000 times. Only 6 videos have been viewed 6000 to 10000 times and only two videos each have been viewed between 16000 -20000 times and 21000 – 30000 times. For better clarity in data analysis.

4.3.:- Distribution of "OER" Videos by number of 'Likes'

Likes' to OER videos on YouTube

No. of Likes	No. of Videos
1 – 20	87
21 – 40	11
41 – 60	4
61 – 80	2
81 – 100	1
MoreThan 100	5
	Total - 110

In the present social media culture , "Likes" has become a crucial parameter to measure the familiarity and popularity of any multimedia content on the web. In this case of YouTube Videos , the number of likes somehow symbolizes the acceptance of that piece of video among the viewers. Again in the above table, the videos are grouped under six broad categories according to the likes they received. A maximum of 87 of them have received likes ranging from 1 to 20. And a lowest number of 1 videos have received like ranging from 61 to 80. Some of the videos have also received more than 100 likes and their count is 5.
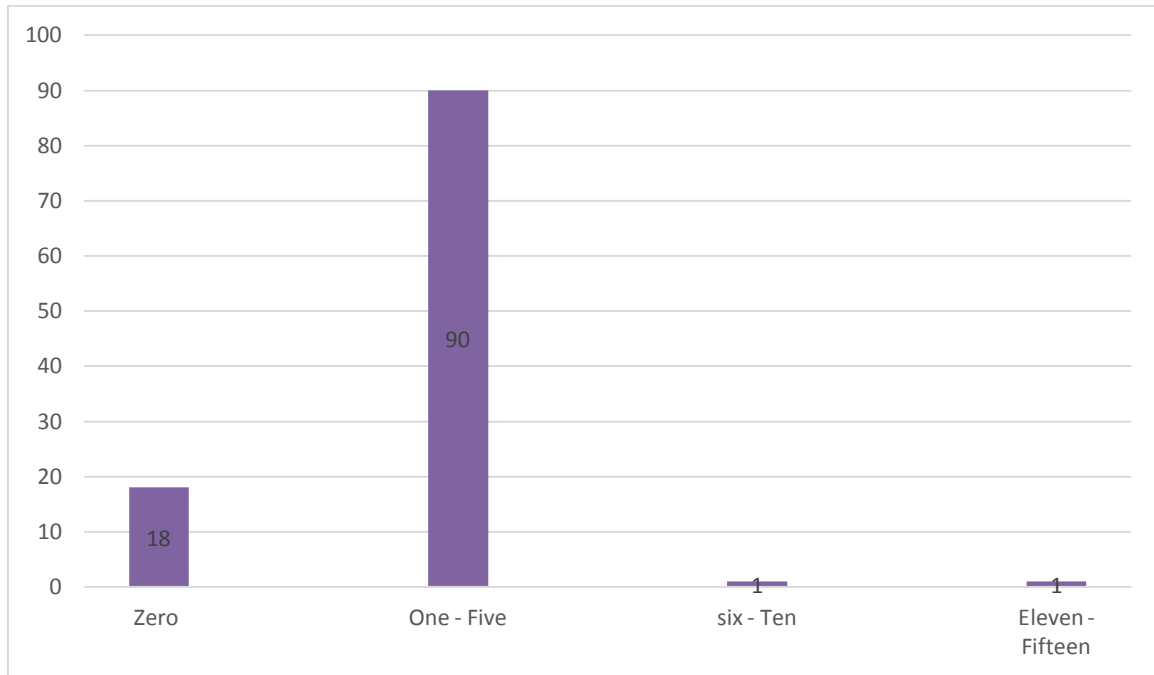
4.4. Distribution of "OER" Videos by Number of "Dislikes"

"Dislikes" to OER Videos on YouTube

Number of Dislikes	Number of Videos
0	18
1 - 5	90
6 – 10	1
11 - 15	1
	Total - 110

The web has provided complete freedom to its users so as to have an opinion on its content. The viewers of the YouTube as well have the liberty to like or dislike the particular piece of video they watch by pressing the respective button. If the number of likes depicts the positive acceptance of the video then the number of dislikes shows the rejection of it by its viewers. In the above table, the videos are grounded under 4 groups having a range of 5 Dislikes each. 18 Videos have received absolutely no dislike. A highest of 90 number of videos are coming under the range of 1 to 5 dislikes and a least of 2 video fall under the range of 5 to 10 and 10 to 15 dislikes. A Graphical representation of the tabled data is provided in figure.

Figure: "Dislikes" to OER videos on YouTube

4.5. Distribution of "OER" Videos By Number of "Comments"

"Comments" On OER Videos

Number of Comments	Number of Videos
Zero	67
1 – 5	24
6 – 10	5
11 – 15	3
Morethan 15	2
	Total-110

YouTube is an interactive web and it enables the viewers to give their opinion through comments. In the above table 3.5. the researcher has found that the maximum no. of videos that is 24 in number falling in the group of 1 – 5 Comments. There are 67 videos which did not have any comments. There are 2 videos which have more than 15 comments. A graphical representation of the tabled data is provided in figure.-

Figure. - Comments On OER Videos
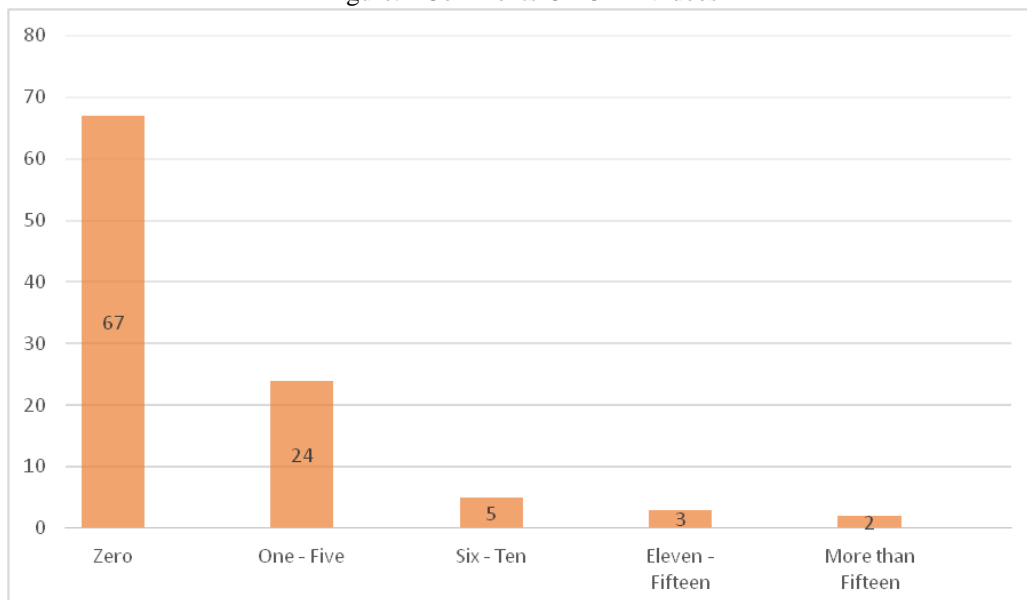
4.6. Time Duration of "OER" Videos

Table :- Time length of OER Videos

Time of Videos (Minutes)	Number of Videos
Up to 10	61
10 to 20	13
20 to 30	5
30 to 40	4
40 to 50	5
50 to 60	8
Morethan 60	14
	Total - 110

The length of a streaming video can influence the spreading popularity of it as people might find it too lengthy and hence boring. So the researcher intended to find out the length of each video in terms of their duration. For that a gap of 10 Minutes is considered for grouping them. A higher of 61 videos are falling under the first group that is ranging from 1minute to 10 minutes , Again 14 videos are coming in the group of more than 60 minutes of duration. Thus it can be stated that length of duration has definitely has some impact on the uploading as well as viewership of such streaming videos. The tabled data is again shown in figure For a clear understanding.

Figure. Time length of OER Videos
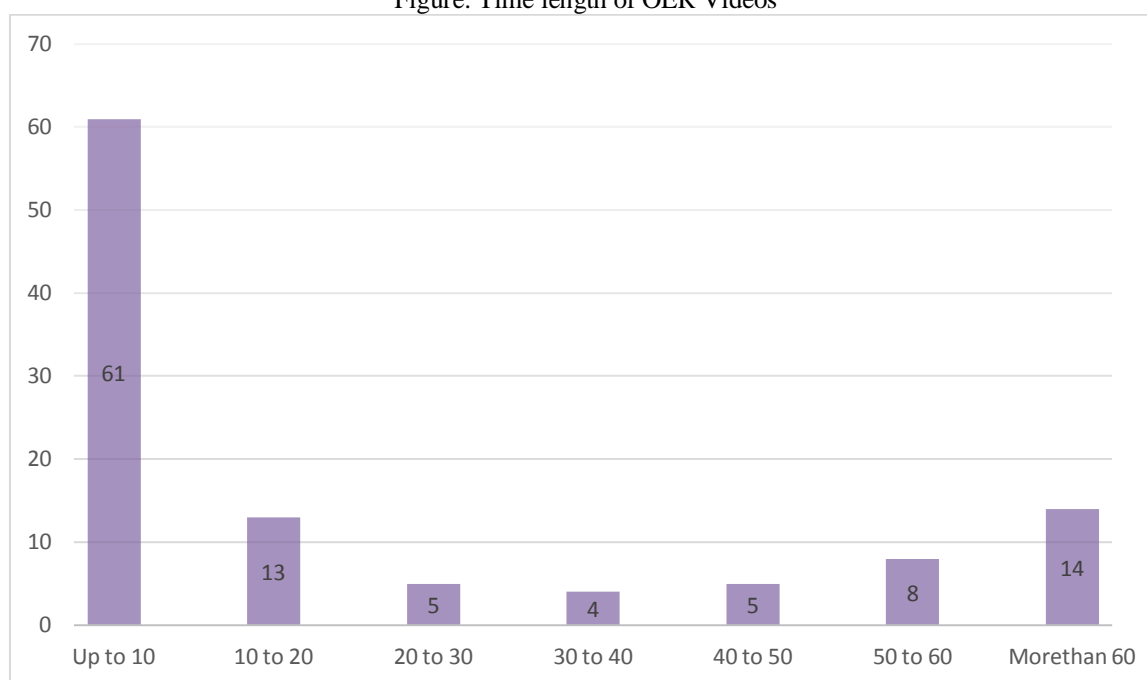
Major Finding of Research:-

In the light of interpretation of data the researcher has to use all the care and cautioning the process of formulation and generalizations. The final step of research process demand critical and logical thinking if summarizing the findings of the study. The generalization drawn on the basis of research findings should be in agreement with facts and should not complete with the known laws of nature. The suggestions for the application of research finding in practical setting and suggestion of problems for further research may also be provided with generalization,

As a result a systematic analysis of data for the present study in the previous chapter, the researcher observes the following findings about the content analysis of YouTube video on Open Educational Resources.

Finding – 1:   From the analysis of 110 top viewed 'OER' Videos on YouTube, 14% of videos
Were deposited in May & June Month from the date of declaration of OER i.e. on 18th APRIL 2008. It is considered as the most productive month.

Observation-: Realizing the importance of the issue OER which will definitely be a prime agenda

For discussion on various forums , videos were produced and uploaded by different agencies for wider circulation among the people. It took a month after the sudden declaration of the event .

Finding – 2:   The popularity of the videos can be measured by the number of views the particular video received. 3% of videos were highly popular with more than 30000 views and the highest being 47328 views.

Observation-: The video which received highest views during the time the study was undertaken was titled "Reports on the teaching special education online during COVID-19" Created by Jeremy Glauser (Founder and CEO of eLUMA) & Kelly J.Grillo and Under the affiliation of International Council for Exceptional Children & this video Content is Identifying the necessary tools and strategies for online instructions.

Finding – 3:   5% of videos are having more than 100 likes. It means people prefered those video as good videos. A video entitled "Open Educational Resources". Teacher create what they experience 2nd has received highest number of likes 314.

Finding – 4:   People commented on the videos on OER which ranged between 1 to 15. The video entitled "open educational resources" has highest number of comments. The comments sometimes are very informative corrective also. 2% of the videos have received more than 15 comments from the viewers.
Finding – 5: 61% of the videos were uploaded with the duration of 1 to 10 minutes. It found   that the video having short duration is mostly preferable by the viewers.

Further Research -:
          This study provides a starting point for future studies that seek to explore the message sensation value (MSV) of topics in YouTube videos on 'open educational resources'. Future research regarding MSV needs to be conducted including the effects of MSV on audience perceptions. One way to start would be to conduct a qualitative content analysis on a similar video sample. By analyzing comments on videos, the researcher can identify certain commonalities among viewers.
          In addition, analyzing the content of the video itself in a qualitative fashion would provide archer data set with examples of specific themes. Moreover, by interviewing video up loaders, the researcher could get analytics of specific videos such as demographics and shares. This can help identify if varying levels of MSV affect who watch the videos and whether or not they get more exposure.

V.   CONCLUSION
          YouTube is one of the emerging media channel and worth investigating because of unique characteristics differing from mass media. YouTube enable the users to upload, share, comments, like to videos. Most YouTube videos are uploaded by individuals who are nonprofessionals' journalist, videos producers, or companies. YouTube user not only uploads video clips from existing mass media contents, but also uploads clips made by them. Except this there are some other publishers who upload videos for the dissemination of information. Hence learning communities should take benefit out of these videos.

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