

Content Analysis of Youtube videos on National Education Policy, 2020

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Abstract

The twenty first century is predominantly driven by digital technologies and the education sector has been hugely influenced by the advent of these technologies. Youtube has become the first classroom for many and the videos are being extensively viewed for the consumption of first hand and information on diverse subjects. In this study, efforts have been made to determine the popularity, quality, and viewer engagement of Youtube videos on NEP-2020 from the analysis of various parameters such as users' subscriptions, views, comments, likes, etc. The study uses the top 100 youtube videos based on the number of view counts. 70% of the videos have a VIQI score of more than 3 (out of 5) which reflects the content quality is high. More than 60% of viewer comments were in favor of NEP-2020.

Keywords: NEP 2020; Content Analysis; National Education Policy; Higher Education; COVID-19.

INTRODUCTION

The year 2020 will be remembered for the out break of the COVID-19 Pandemic worldwide. In the same year, the introduction of the (New) National Education Policy (NEP), 2020 created a milestone in the education ecosystem of India. The policy stands on strong values and ethos indigenous to India. Many of its underlying features are entirely innovative and unprecedented. The unconventional provisions and practices have invited a lot of debate, discussion, and awareness

campaigns across the nation and abroad. However, there is still scope for extensive orientation and understanding. Social media in general and Youtube in particular have been the most amicable source of information for the masses in building up understanding and knowledge. Youtube is used by both experts and common people to acquire and share information and expertise. Besides its widespread use, individuals prefer Youtube to other social media plat forms due to its capacity to deliver both audible and visual information. Due to its huge and diversified user base, Youtube has the potential to be a media platform for enhancing public knowledge and awareness. On the other hand, Youtube is a highly vulnerable medium for transmitting false hood and mis-information. Based on this, a good number of content analysis studies have been carried out to understand the quality of videos and there by the authenticity and reliability of information disseminated through these videos.

Content Analysis of Youtube Videos

Youtube videos are being extensively viewed

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for the consumption of firsthand information on diverse subjects. A new Pew Research Study surveyed 4594 Americans and found that 51% of Youtube users were using Youtube videos to learn new things (Berry, 2018). This proves that Youtube has great potential as a source of learning resources. However, sometimes the fake viral videos on Youtube also spread mis-information and cause irreparable disaster. Therefore, content analysis of Youtube videos on specific content is under taken in order to investigate their quality, authenticity and impact. National Education Policy, 2020 has been a point of discussion in the education sector and many videos on its various aspects have been published on Youtube. The present study is an effort to assess the content quality in accordance with the many criteria that were taken into account, including video characteristics, types, content quality, etc. In order to determine a video's popularity, quality, and quantity, Youtube provides statistics on its users' views, comments, ratings, etc. The study uses the top 100 Youtube videos on NEP-2020 and their potential features were examined to determine their informational value and usefulness. It was also revealed that only 5 (33%) videos on NEP-2020 have an acceptable level of popularity (likes to views ratio).

Criteria for selection of Videos

Criteria for selection

- The video must be either in English and Hindi or in both languages only.
- The primary subject matter of the video must be 'National Education Policy 2020'.
- Videos with running times longer than 20 minutes or more.
- Videos with proper sound and video quality.
- Recurring videos were ignored.

Objectives

1. To find out the content quality of the videos.
2. To ascertain Interactive Index (Video popularity).
3. To find a relation between popular videos and video content quality.
4. To find out whether the videos serve the content which helps the people to update his/her knowledge of NEP-2020.
5. To find the most preferred language.

Literature Review

In recent times, stated that some of the fastest-growing media exposures are Internet based (Barry et al., 2016; McClure et al., 2016)¹. According to (Lenhart, 2015)¹ Internet access is widely available to youth, with 92% of teens reporting daily use. Video sharing platforms can combine the compelling high production values of traditional visual media with influential peer-to-peer dialogue (Huang et al., 2016; Oksanen et al., 2015).¹ Laghate (2013)³ revealed that the exceptional and unparalleled amplification of Youtube in India is in commensuration with the worldwide prevailing trends. Besides, more than half of Youtube users in India share videos on other social networking sites (Shree, 2013).³ Knösel and Jung (2020)⁵ conducted research on the degree of expertise in orthodontic writings on Youtube. Despite Youtube TM being a forum for sharing orthodontic experiences, it was determined that the substance of the relevant videos was insufficient. Ilkay Peker and Melih Ozdede (2020)⁶ According to the findings of this study, dental Youtube videos connected to COVID-19 had a large number of views; never the less, the videos were typical of average quality and usefulness. Bezner et al. (2014)⁸ investigate the content and quality of videos on the Internet linked to pediatric surgical diagnosis and found medical experts' videos were more accurate and comprehensive than those produced by ordinary people.

Research Methodology

The research has been designed in the following three steps which include: *Collection of a Playlist of Youtube videos on New Education Policy-2020*, *Analysis of the video Contents*, and *Analysis of Video Characteristics*. Youtube (<http://www.youtube.com>) was searched for videos on National Education Policy, 2020. According to "Google Trends," the most popular search keyword for 'NEP, 2020' was "National Education Policy." The videos on Youtube were classified according to the duration (20 minutes or more) and the relevancy was arranged in decreasing order of "view counts" an indicator of video. The top 100 popular videos were retrieved for further analysis. Each video was reviewed, taking the information about NEP in the content into consideration. The content quality of the videos was evaluated according to the following parameters: the title, the host channel, content type, and language medium. The characteristics of the videos were evaluated according to vital parameters such as likes, comments, number of subscribers, and duration of videos.

Evaluation of content quality of each video using VIQI

The Video Information and Quality Index (VIQI) index is used to evaluate video quality. The factors included under VIQI are flow, accuracy, quality, and precision of the videos (Ozdede & Pecker, 2020). The videos on NEP-2020 retrieved from Youtube were found to have significant differences in terms of average VIQI score. Each factor was given a maximum score of 5, the over all content score for each video is 20. The VIQI is calculated by taking average content score of varying between 1 to 5. Videos were grouped in five categories based on their quality derived from the average VIQI score Excellent, Very Good, Good, Average, and Low. Each of the reviewed and scores were separately assigned for each video.

Videos having a high VIQI score are generally considered to be of excellent quality. 15 (15%) videos were discovered to have an average VIQI score between 4 and 5. A majority of 55 (55%)

videos scored between 3 and 4, 24 (24%) videos scored between 2 and 3, and only 2 (2%) videos each have VIQI scored between 0 and 1. The video entitled "Biggest News: Full syllabus of all classes changed. New Education Policy 2020. New Education System (Hindi) is found to be the best video with a VIQI score of 4.5. This video was hosted by a channel named The Lallantop Show from TV Today Network Limited.

Table 1: Average VIQI score of YouTube videos on NET-2020

Average VIQI Score	Video Quality	No. of videos	Percentage
0_1	Low	2	2%
1_2	Average	2	2%
2_3	Good	24	24%
3_4	Very Good	55	55%
4_5	Excellent	15	15%

Table 2: Top fifteen YouTube videos on NEP-2020

Title	Date of upload	YouTube Chanel	Language	Subscribers	Likes	Views	Popularity (Likes/Views)x100
Biggest News: Full syllabus of all classes changed. New Education Policy 2020. New Education System.		Aman Dhattarwal	Hindi	4.18	229000	2611617	8.768514
Everything you need to know about the National Education Policy #NEP2020	2-Aug-20	Faye D'Souza	English	0.22	2000	29347	6.815007
National Education Policy 2020. NEP. Unacademy JEE.		Unacademy JEE	Hindi	2.06	5100	75009	6.799184
What's new in New Education Policy 2020?	31-Jul-20	Priya Jain	Hindi	2.09	34000	728290	4.66847
New India Debate: New Education Policy	18-Sep-21	SansadTV	Hindi	7.04	964	21904	4.401023
Sadhguru on India's New National Education Policy.		Sadhguru	English	10.5	7800	206512	3.77702
Modi Cabinet approves New Education Policy: Big Change in the Education Policy (Translated in English)	29-Jul-20	The Lallantop Show. TV Today Network Limited	Hindi	22.7	50000	1362009	3.671048
To The Point with Dr. K. Kasturirangan, Chairman, Draft Committee, National Education Policy.	14-Aug-20	Sansad TV	English	7.04	340	10213	3.32909

Table cont.....

National Education Policy, 2020. Editorial Analysis.	31-Jul-20	Drishti IAS :	English	2.73	2100	67480	3.112033
National Education Policy 2020 & fixing India's wasteful degree-exam disaster.	29-Jul-20	The Print	English	2.02	13000	452535	2.872706
National Education Policy 2020// Details explained In Bengali/Debabrata Debnath"	31-Jul-20	The Chemistry Club	Bengali	0.147	471	18365	2.564661
New Education Policy 2020 Rashtriya Sikshya Niti-2020. Draft National Education Policy 2019.	28-Dec-19	Sure Success	Hindi	0.249	297	15282	1.943463
Reality Check A New Education Policy After 34 Years: Reality Check	29-Jul-20	NDTV	English	12.1	1200	65057	1.844536
Top Educationists Break Down New Education Policy India Development Debate	29-Jul-20	ET NOW	English	0.526	91	6994	1.301115
New Education Policy 2020. End of 10+2 System. New System 5+3+3+4 NEP 2020. Nai Siksha Niti.	2-Aug-20	Khan GS Research Centre	Hindi	18.2	425	12047133	0.003528

Interactive Index (Video Popularity)

Mark Robertson (2014) laid down the ratio of Likes to Views as the metrics to determine video popularity or Interactive (<https://tubularlabs.com/blog/3-metrics-youtube-success/>). Table 2 demonstrates the Popularity of the NEP-2020 videos in which the video hosted by Aman Dattarwal, a Youtuber and a career advisor has the highest popularity with the highest interactive index. Robertson suggested that a Likes to Views ratio of more than 4 indicates to be a video with a standard level of popularity. It is evident from the table below that only 5 (33%) videos on NEP-2020 have an acceptable level of popularity.

Popularity of the video sources

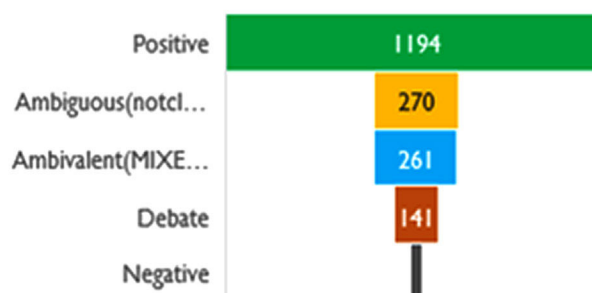
The popularity of video sources can be known by the number of subscribers of the Youtube channel. Out of 100 videos on NEP-2020, 14 videos hide the number of subscribers. The remaining 86 videos with subscriber information available were analyzed. It was found that the most popular video was titled "Modi Cabinet approves New Education Policy: Big Change in the Education Policy" (Hindi) hosted by The Lallantop Show. TV Today Network Limited with the highest subscriber i.e. 22.7 million followed by Khan GS Research Centre (18.2 million).

NDTV (12.1 million), and Sadguru (10.5 million).

Content quality of video popularity

It was observed from the study that there is no correlation between the popularity and quality of the videos on Youtube. The video which has the highest VIQI score was the most popular video in terms of its likes-to-views ratio. However, a majority of the videos have less than 4 likes to views scores were the videos with high VIQI scores ranging from 3 to 5. While the video quality is based on flow, accuracy, quality, and precision, video popularity is based on views, likes, and comments which may have been influenced by several other factors.

Types of Comments on video content

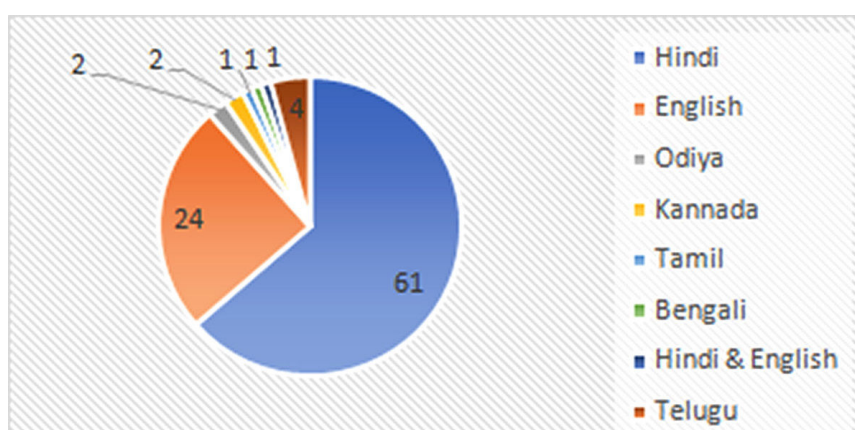


Positive	Ambiguous (not clear)	Ambivalent (Mixed Ideas)	Debate	Negative
1194 (62.67%)	270 (14.14%)	261 (13.70%)	141 (7.40%)	39 (2.04%)

The comments of the videos were analyzed and classified under different five distinct categories such as positive comments, Ambiguous comments

i.e. the comments that lacks clarity, ambivalent comments i.e the comments with mixed ideas, debates without established opinions, and lastly negative comments. The first 20 relevant comments of each video are considered and each comment is analyzed individually. It is found that 62.67 % of the messages are in favor of NEP. Only 39 (2.04%) have negative opinion on NEP-2020.

Hindi	English	Odiya	Kannada	Tamil	Bengali	Hindi & English	Telugu
61 (63.54%)	24 (25%)	2 (2.08%)	2 (2.08%)	1 (1.04%)	1 (1.04%)	1 (1.04%)	4 (4.16%)



Preferred Language of Videos

It has been observed that the videos have been uploaded different languages, including Hindi, English, Odia, Kannada, Tamil, Bengali, and Telugu.

Hindi is the most preferred language with 63.54 percent videos on NEP-2020 are in Hindi, English is the second most popular language with 25% videos followed by other provincial languages in small numbers.

CONCLUSION

There is a broad range of videos on National Education Policy, 2020 available on Youtube, and most of them are descriptive in nature. So far as the content and delivery are concerned, most of the videos are of high quality and hosted from various sources including individuals, media houses, government agencies, corporate bodies, trusts, etc. From the comments, it is revealed that people are highly positive toward the implementation of NEP-2020. As compared to English, most viewers prefer Youtube videos on NEP-2020 in Hindi. As most people turn to Youtube for understanding

the issues steps may be taken to develop high-quality videos taking experts as speakers. Further, it is recommended to open a dedicated Youtube channel on NEP-2020 to host such videos for easy discovery and access.

REFERENCES

1. Primack, B. A., Colditz, J. B., Rosen, E. B., Giles, L. M., Jackson, K. M., & Kraemer, K. L. (2017). Portrayal of alcohol brands popular among underage youth on Youtube: a content analysis. *Journal of studies on alcohol and drugs*, 78(5), 654-664.
2. Basch, C. H., Menafro, A., Mongiovi, J., Hillyer, G. C., & Basch, C. E. (2017). A content analysis of YouTube™ videos related to prostate cancer. *American journal of men's health*, 11(1), 154-157.
3. Sohal, S., & Kaur, H. (2018). A content analysis of YouTube political advertisements: evidence from Indian parliamentary elections. *Journal of creative communications*, 13(2), 133-156.
4. Al-Silwadi, F. M., Gill, D. S., Petrie, A., & Cunningham, S. J. (2015). Effect of social media in improving knowledge among patients having fixed appliance orthodontic treatment: a single-center randomized controlled trial. *American Journal of*

- Orthodontics and Dentofacial Orthopedics, 148(2), 231-237.
5. Yilmaz, H., & Aydin, M. N. (2020). YouTube™ video content analysis on space maintainers. *Journal of Indian Society of Pedodontics and Preventive Dentistry*, 38(1), 34.
 6. AlGhamdi, K. M., & Moussa, N. A. (2012). Internet use by the public to search for health-related information. *International journal of medical informatics*, 81(6), 363-373.
 7. Basch, C. H., Kecojevic, A., Berdnik, A., Cadoret, V., & Basch, C. E. (2017). An analysis of widely viewed YouTube videos on anal cancer. *International Journal of Preventive Medicine*, 8.
 8. Bezner, S. K., Hodgman, E. I., Diesen, D. L., Clayton, J. T., Minkes, R. K., Langer, J. C., & Chen, L. E. (2014). Pediatric surgery on YouTube™: is the truth out there?. *Journal of pediatric surgery*, 49(4), 586-589.
 9. Boston, M., Ruwe, E., Duggins, A., & Willging, J. P. (2005). Internet use by parents of children undergoing outpatient otolaryngology procedures. *Archives of Otolaryngology-Head & Neck Surgery*, 131(8), 719-722.
 10. Beall Iii, M. S., Golladay, G. J., Greenfield, M. L. V., Hensinger, R. N., & Biermann, J. S. (2002). Use of the Internet by pediatric orthopaedic outpatients. *Journal of Pediatric Orthopaedics*, 22(2), 261-264.
 11. Chang, J. Z., Chen, P. H., & Kuo, S. C. (1999). An appliance to replace prematurely lost maxillary anterior teeth using double stainless steel crowns on abutment teeth. *The Journal of Clinical Pediatric Dentistry*, 23(4), 285-288.
 12. De Boer, M. J., Versteegen, G. J., & Van Wijhe, M. (2007). Patients' use of the Internet for pain-related medical information. *Patient education and counseling*, 68(1), 86-97.
 13. ElKarmi, R., Hassona, Y., Taimah, D., & Scully, C. (2017). YouTube as a source for parents' education on early childhood caries. *International journal of paediatric dentistry*, 27(6), 437-443.
 14. Greene, J. A., Choudhry, N. K., Kilabuk, E., & Shrank, W. H. (2011). Online social networking by patients with diabetes: a qualitative evaluation of communication with Facebook. *Journal of general internal medicine*, 26(3), 287-292.
 15. Hansen, C., Interrante, J. D., Ailes, E. C., Frey, M. T., Broussard, C. S., Godoshian, V. J., & Gilboa, S. M. (2016). Assessment of YouTube videos as a source of information on medication use in pregnancy. *Pharmacoepidemiology and drug safety*, 25(1), 35-44.
 16. Kisling, E., & Høffding, J. (1979). Premature loss of primary teeth: part IV, a clinical control of Sannerud's space maintainer, type I. *ASDC journal of dentistry for children*, 46(2), 109-113.
 17. Knösel, M., & Jung, K. (2011). Informational value and bias of videos related to orthodontics screened on a video-sharing Web site. *The Angle Orthodontist*, 81(3), 532-539.
 18. Kırzioğlu, Z., & Özay Ertürk, M. S. (2004). Success of reinforced fiber material space maintainers. *Journal of dentistry for children*, 71(2), 158-162.
 19. Lena, Y., & Dindaroğlu, F. (2018). Lingual orthodontic treatment: a YouTube™ video analysis. *The Angle Orthodontist*, 88(2), 208-214.
 20. Madathil, K. C., Rivera-Rodriguez, A. J., Greenstein, J. S., & Gramopadhye, A. K. (2015). Healthcare information on YouTube: a systematic review. *Health informatics journal*, 21(3), 173-194.
 21. Nason, K., Donnelly, A., & Duncan, H. F. (2016). YouTube as a patient information source for root canal treatment. *International endodontic journal*, 49(12), 1194-1200.
 22. Nason, G. J., Kelly, P., Kelly, M. E., Burke, M. J., Aslam, A., Giri, S. K., & Flood, H. D. (2015). YouTube as an educational tool regarding male urethral catheterization. *Scandinavian journal of urology*, 49(2), 189-192.
 23. Noll, D., Mahon, B., Shroff, B., Carrico, C., & Lindauer, S. J. (2017). Twitter analysis of the orthodontic patient experience with braces vs Invisalign. *The Angle Orthodontist*, 87(3), 377-383.
 24. Pandey, A., Patni, N., Singh, M., Sood, A., & Singh, G. (2010). YouTube as a source of information on the H1N1 influenza pandemic. *American journal of preventive medicine*, 38(3), e1-e3.
 25. Rachel Henzell, M., Margaret Knight, A., Morgaine, K. C., S. Antoun, J., & Farella, M. (2014). A qualitative analysis of orthodontic-related posts on Twitter. *The Angle Orthodontist*, 84(2), 203-207.
 26. Singh, A. G., Singh, S., & Singh, P. P. (2012). YouTube for information on rheumatoid arthritis – a wakeup call?. *The Journal of rheumatology*, 39(5), 899-903.
 27. Wainstein, B. K., SterlingLevis, K., Baker, S. A., Taitz, J., & Brydon, M. (2006). Use of the Internet by parents of paediatric patients. *Journal of paediatrics and child health*, 42(9), 528-532.
 28. Singh AG, Singh S, Singh PP. YouTube for information on rheumatoid arthritis - A wakeup call? *J Rheumatol* 2012;39:899 903.
 29. Wainstein BK, Sterling-Levis K, Baker SA, Taitz J, Brydon M. Use of the internet by parents of paediatric patients. *J Paediatr Child Health* 2006;42:528 32.

