Using YouTube as Teaching-Learning Resource: Views of Secondary School Teachers

Narendra Kumar Das¹, Ramakanta Mohalik², Rasmirekha Sethy³

¹Research Scholar, Regional Institute of Education, Bhubaneswar, India

²Professor, Regional Institute of Education, Bhubaneswar, India

³Associate Professor, Regional Institute of Education, Bhubaneswar, India

Abstract- YouTube has been emerging as tool which can foster teaching learning process in a positive way. This research explores the views of teachers towards the use of YouTube as a learning resource in secondary schools. In this study a survey method was employed to conduct the investigation with a sample of 10 schools and 40 teachers teaching in secondary schools of Ganjam district, Odisha, India. The selection of the schools and teachers were done with use of random sampling. The sampled teachers consist of 26 male and 14 female, 15 language, 9 social science, 9 science and 7 mathematics teachers. A selfdeveloped questionnaire consisting of 27 items with three options such as yes, no and can't say was used as a tool for data collection. The collected data were analyzed using frequency and percentage and presented in form of table and graph. The study revealed that Ninety percentage of teachers viewed YouTube can be used as a teaching aid in classroom because it enhances the quality of teaching. More than 70% of teachers viewed that YouTube helps learner in achieving learning outcomes and increases students' engagement in learning. YouTube attracts and maintain student interest in learning is viewed by 87.5% of teachers. There are many challenges expressed by more than half of the teachers such as inappropriate and unreliable content, not suitable for all learners, make students addictive, misleads in learning, and develop poor sleeping habits. The study recommended for the better support and training for students and teachers to effectively integrate YouTube into their learning and teaching.

Keywords: YouTube, learning tool, social media, Subscribe, Playlist

INTRODUCTION

Technology has become one of the essential parts in our life. Nothing can be thought without technology now a days. And integrating technology in educational process is the need of the hour. Using technology in educational process is like showing the path to the future children. Technology is a set of powerful tools that the teacher and learner can use to facilitate own

learning process. It can provide opportunities for learning and can create the conditions that optimizes learning" (Switzer et al., 1999). Technology has been emerged as a way to improve the collaboration and communication skill in students as well as in teachers. Students are being more interactive, teachers are engaging students in more problem-based works, and teaching-learning is becoming smoother than ever. This has been reinforced by the wide spread use of social media for education purpose from sharing information to developing skills in students.

SOCIAL MEDIA AS A LEARNING TOOL

In recent years exchange of information and ideas has become very easy with the help of social media. Any news, information, idea, content, and other forms of virtual expression is shared with just one click. Social media has brought a dramatic change in any sector that may be engineering, business, agriculture, news, or even in education. It can be said that education process has been triggered due to the usage of the social media network. Now social media is used more and more to enhance quality education. According to Kumar and Nanda (2022) "With the social-media-based support to open and digitized learning tools, many prospects have emerged in this worldwide network for developing interactive learning strategies, which can be more productive and efficient for the ever-evolving learner requirements". Social media has many benefits when used as a learning tool like it is cost effective, easy to access, can be used anywhere etc. According to Fahimi (2018) "There are several advantages of using social media as an educational gizmo (AI tool). It is without boundaries, not expensive, efficient, provides more access to specialized experts, unlimited resource, friendly relation, prompt and reliable surveys, abreast, and decent tool for creating assignments." Some of the social media platforms such as Facebook, Twitter,

Quora, Reddit: WhatsApp: Instagram, YouTube etc. are being used for educational purpose.

YOUTUBE AS AN EMERGING LEARNING TOOL

YouTube is a video sharing platform started on 14th February 20205 by Steve Chen, Chad Hurley and Jawed Karim of California, United States. Here one person can upload videos to its server, and the same can be accessed by some other one who search the title or a relating word to the title in the search bar. It has been used for various purposes; it is used mostly as an entertainment platform. But at the same time many educational videos are there of various educational field that helps the users to learn about a diverse range of content. There are 2.1 billion users of YouTube worldwide in February 2024 (Statista 16 February 2024) and there are 462 million users in India.

In recent years, YouTube has been used extensively for the learning purpose. "YouTube can serve as a good platform to improve the presentation skills of the students. It may be really difficult to see the presentation of each individual student in the class, however, a descriptive presentation can be created by students and uploaded on YouTube. This can be a part of classroom activities and home assignments. A growing number of teachers are encouraging students to create their own media and upload it on YouTube" (Lange, 2018). YouTube holds a vast number of educational channels providing teaching in various fields, subjects and in various language as the learner needed. Contents in the form of video presentation, animated video explanation, presentation helps the learners for a better understanding. Many verified experts of different field have their YouTube channel teaching for specific standard or subject. After the pandemic there were many schools which started teaching through YouTube, the non-tech teachers also intended towards using YouTube for teaching their lessons, because it was not only a supplement to their teaching rather than it was better than the classroom teaching.

There are some common facilities available in YouTube, the same can be used for facilitating learning:

Searching: It is the common way to get educational videos. Just typing the content or subject the user want to study in the search bar of the YouTube located on the top of the homepage. Automatically YouTube will

display contents related to the searched topic with the help of its algorithm. And out of the displayed video contents the user can select anyone according to the need to see. Now a day's one does not even need to type what he/she wants to learn, rather by just telling what one wants to learn, it shows the related video. Subscribing: Once the user gets the desired video, he/she can subscribe the channel to get other similar type of video contents, if the channel is based on what the user wants to learn. Subscribing a channel will let to know whenever a new video is posted by the same content creator.

YouTube suggestion: Its algorithm is designed to show the contents related to the previous searched contents. If once searched about something, it will be showing more and more related topic or video related to the same content which may help one getting more knowledge about the same topic.

Playlist: Playlist feature allows the user to save the videos one like to see later or want to see it again. It is just like arranging the videos from interested area in an organized manner. The user can name the playlist as per the need.

Using YouTube in the learning process has many benefits:

- Accessibility: It is easy to access. If you have a smartphone and internet service, can get the contents free of cost just by searching in the search bar. It is accessible for all learners.
- Diverse and in-depth content: Contents related to any topic is available in the form of video explanation, demonstration, animated presentation, documentary etc. A diverse approaches of teaching videos can be found, which helps the students as well as the teachers.
- Flexibility: YouTube allows to study anything at any time of the day. Evan same content with different language is also available in its repository. One can see the contents as much time as needed, it helps the children who are slow learners. It also allows to pause the video, if someone wants to note something.
- Up-to-date: Contents from diverse language background, cultural background, economical background, subject background is found here. We can get videos from anywhere of the world, enabling it to connect to the world and the recent trends in the outer world.

- Experts teaching: Many experts from their own field provide free lectures on the topic. So, we can get verified contents from experts.
- Group study: A teacher can conduct his class through YouTube where all students from the class can join. It can also act like a flipped learning technique, where teacher can teach the lesson before the class online and can discuss the higher order applications of the same content during class hour.

RATIONALE OF THE STUDY

YouTube has been used widely for learning and skill development in different subjects across level of education as it is one of the fast and economical medium of communication. It has been used by all level of learners from children to adult for different purpose. Time has come to integrate the YouTube videos in formal school education as learning resources and supplementary material as ICT component. On the other hand, the New Education Policy-2020 suggested for the ICT-integrated teaching method where ICT-equipped infrastructure will be made available in educational institutions. The Digital India Campaign launched in 2015 aimed at promotion of digital learning and the creation of digital infrastructure for educational institutions. Now India has spread its digital infrastructure to every corner of the country so that internet facilities can be made available to each and every village.

Some of the researchers have conducted studies on the different aspects of the YouTube for learning across Globe. The important findings are discussed in following paragraphs.

Tahmina (2023) found that YouTube helped in vocabulary learning and enhancing speaking skills in English. Gyeltshen et al. (2023) concluded that, YouTube videos can enhance the content delivery in mathematics instruction and can improve students' performance. Anastasya, et al. (2022) reported that YouTube has a positive impact on students learning process as it offers varied and fun learning environment. Trabelsi et al. (2022) found that YouTube played the best learning companion than others as it helped them better understand instructional content delivery. Zheniskhankyzy and Gersonskaya (2022) found that YouTube is an essential tool in classroom, as it attracts the attention of students and

develops their mentality and creativity. Shoufan & Mohamed (2022) concluded that a concern towards the quality of content in YouTube is increasing day by day. Most studies on YouTube's impact have been shown a positive impact on students learning in terms competencies, interest, motivation, skill, engagement level, test performance enhancement. Abbas & Qassim (2020) showed that YouTube acts as an essential tool in classroom as it attracts students and it develops mentality and creativity. YouTube brings the fun element into classes which meet interest of students. Pratma et al. (2020) concluded that YouTube is a necessary tool as it appeals attraction and creativity. It also increases the fun element of class room transaction. Yaacob et al. (2020) found that YouTube as a learning resource was perceived useful and it has an effect towards the society also. Almurashi (2016) acknowledges YouTube as an excellent supplementary learning resource.

The above discussion of findings indicated that previous studies were mainly conducted outside of our country and a few are conducted in India. It is found that YouTube can be used for teaching learning for the development of motivation, skills, and interest among students. This study attempted to understand the views of teachers on using YouTube as learning resources in Indian schools at secondary level.

OBJECTIVE

- To study the views of teachers towards using YouTube in teaching.
- To examine the views of teachers towards using YouTube for students learning and engagement.
- To study the views of teachers towards using YouTube for supporting students and teachers.
- To find out the challenges in using YouTube as learning resources in school education.

METHODOLOGY

Survey method was used to meet the objectives of the study about the uses of YouTube in teaching learning process. All the school teachers working in Government secondary schools of Ganjam district, Odisha, India were the population of this study. Basing on the nature of the study 10 schools were chosen for the study randomly. Further, four teachers were selected randomly from each school. Total 10 secondary schools and 40 teachers were the sample of

the study. Out of 40 teachers, 26 were male and 14 were female. Further, 15 teachers were from language, 9 from science and 9 from social science and 7 from mathematics. Self-developed questionnaire consisting of 27 items with three options such as yes, no and can't say was used as tool. The tool was based on the four dimensions such as teaching learning, student learning & engagement, supporting students and teachers and challenges in use. Content validity of the tool was ensured by taking experts comments and suggestions Table 1: YouTube in Teaching

during the development. The test-retest reliability was found to be .74. The data was collected by direct interaction of researcher with participants. Data analysis was done with frequency and percentages.

DATA ANALYSIS AND INTERPRETATION

The collected data were processed in the MS Excell, analyzed with the use of frequency and percentage, and presented objective wise in form of tables and bar graphs.

Sl. No	Items	Yes N (%)	No N (%)	Can't say N (%)
1	Teaching aid in classroom transaction	36 (90%)	2 (5%)	2 (5%)
2	Enhances the quality of teaching	36 (90%)	4 (10%)	0
3	Enhances the learning experience for students	19 (47.5%)	15 (37.5%)	6 (15%)
4	Supplementary resource for learners	31 (77.5%)	7 (17.5%)	2 (5%)
5	Time saving in teaching learning process	15 (37.5%)	16 (40%)	9 (22.5%)
6	Opportunity to see the lesson again and again	34 (85%)	4 (10%)	2 (5%)

From the table it is found that 90% of the teachers agreed YouTube can be a valuable teaching aid in the classroom. They believe that it helps to improve the quality of their teaching. Further, 47.5% of the teachers mentioned that YouTube improves the overall learning experience for students. A notable 77.5% of the teachers agreed that YouTube serves as an excellent supplementary learning resource, providing additional support to what students learn in class. A significant 85% of the teachers reported that YouTube is especially beneficial for students because it allows

them to watch content multiple times. This feature helps students understand and retain information better. On the other hand, 40% of the teachers disagreed with the idea that using YouTube takes up too much time in the teaching and learning process. Overall, the responses clearly indicate that YouTube is seen as a beneficial tool in education by the majority of the teachers. The responses of teachers about uses of YouTube for teaching is graphically presented in the Figure-1.



Fig.1: Percentage of teachers favour use of YouTube in teaching

Table 2: YouTube for Student Learning and Engagement

Sl. No	Items	Yes N (%)	No N (%)	Can't say N (%)
1	Makes complex concepts to learn easily	25 (62.5%)	12 (30%)	3 (7.5%)
2	Integration enhances student understanding	26 (65%)	3 (7.5%)	11 (27.5%)
3	Incorporated as a part of lesson plans	27 (67.5%)	6 (15%)	7 (17.5%)
4	Achieving the learning outcomes	28 (70%)	2 (5%)	10 (25%)
5	Increased engagement of students in learning	31 (77.5%)	6 (15%)	3 (7.5%)

The data reveals that 62.5% of teachers believe YouTube simplifies complex concepts, indicating it is an effective learning tool. Additionally, 67.5% of teachers support the incorporation of YouTube into lesson delivery. Moreover, 70% of teachers reported that YouTube helps in achieving learning outcomes, demonstrating its positive impact on students' academic performance. YouTube is also recognized

for boosting student engagement. According to the survey, 77.5% of teachers recommended it for this purpose. However, opinions on YouTube's overall usefulness are mixed. It can be concluded that above 60% of teachers viewed YouTube facilitate students learning and engagement. The teacher response on students learning and engagement in YouTube is graphically presented in the Figure-2.

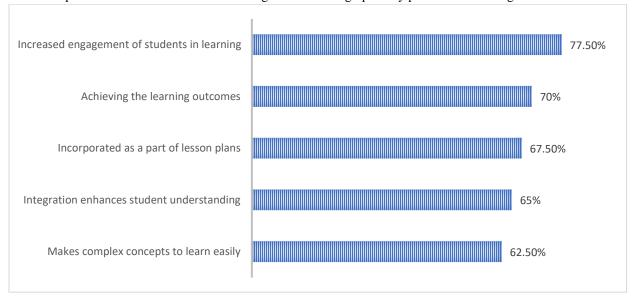


Fig.2: Percentage of teachers use of YouTube for students learning and engagement

Table 3: YouTube for Supporting Students and Teachers

Sl. No	Items	Yes N (%)	No N (%)	Can't say N (%)
1	Attracting and maintaining student interest	35 (87.5%)	2 (5%)	3 (7.5%)
2	Motivate students towards learning	22 (55%)	7 (17.5%)	11 (27.5%)
3	Learning tool outside of class for students	17 (42.5%)	16 (40%)	7 (17.5%)
4	Create curiosity among students	27 (67.5%)	9 (22.5%)	4 (10%)
5	Students may lose the habit of book reading	23 (57.5%)	8 (20%)	9 (22.5%)
6	Promote professional development of teachers	22 (55%)	13 (32.5%)	5 (12.5%)
7	Facilitates in capacity building of teachers	26 (65%)	11 (27.5%)	3 (7.5%)

It is revealed that majority of (87.5%) of teachers viewed YouTube helps to attract and maintain students' interest in learning. More than half of the teachers, 55%, felt students are motivated to learn through YouTube, though a notable 27.5% remain

unsure about its impact on students' motivation. About 42.5% of teachers expressed that YouTube can be used for educational purposes beyond class time. This indicates mixed responses regarding YouTube's usage outside formal educational settings. Importantly,

67.5% of teacher reported that classroom activities involving YouTube sparks curiosity of students leading them to seek additional information. This highlights YouTube's potential to deepen learning engagement. More than 50% of teachers viewed YouTube as means for professional development of teachers by facilitating teachers learning. Overall, while YouTube is successful in capturing interest,

motivating learning, and fostering curiosity for students, there is a need for targeted strategies to enhance engagement and ensure that more students benefit from its educational potential. The responses of the teachers on YouTube supporting teachers and students in learning is graphically presented in the figure-3.

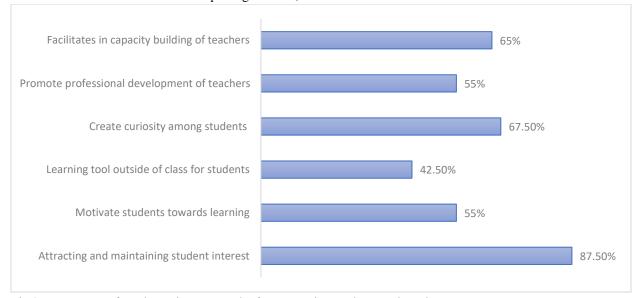


Fig.3: Percentage of teachers views YouTube for supporting students and teachers

Table 4: Challenges in Using YouTube as Learning Resource

Sl. No	Items	Yes N (%)	No N (%)	Can't say N (%)
2	Inappropriate or distracting content on YouTube	25 (62.5%)	9 (22.5%)	6 (15%)
3	Inappropriate and unreliable educational content	27 (67.5%)	10 (25%)	3 (7.5%)
4	Not meeting the diverse learning needs of student	27 (67.5%)	13 (32.5%)	0
5	Not for overall development of learner	31 (77.5%)	6 (15%)	3 (7.5%)
6	Students become addictive to watch	29 (72.5%)	5 (12.5%)	6 (15%)
7	Misleads learners who use YouTube	35 (87.5%)	4 (10%)	1 (2.5%)
8	Distracts the sleep cycle of learners	26 (65%)	7 (17.5%)	7 (17.5%)
9	Not promoting critical thinking	31 (77.5%)	5 (12.5%)	4 (10%)

The data reveals that majority of teachers face various challenges when using YouTube in the classroom. Inappropriate or distracting content is an issue for 62.5% of teachers and finding appropriate and reliable educational content and not meeting the learning needs of students are challenges for 67.5% of teachers. Furthermore, 77.5% believe YouTube cannot contribute to the overall development of a learner. 72.5% of teachers reported that students became addictive to watch YouTube video in the name of

learning, which misleads them in learning. YouTube creates sleep disorder among students due to constant use of YouTube video. Majority of teachers viewed that YouTube does not promote critical thinking skills as readymade videos are available. It can be concluded that teachers report many and varied challenges and concerns about the use of YouTube as learning resources. The challenges faced by teachers and students in using YouTube for learning is presented graphically in the figure-4.

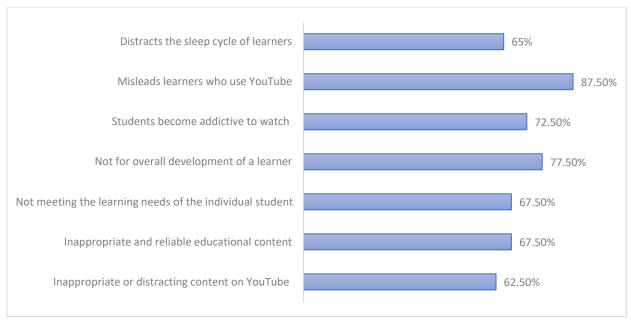


Fig.4: Challenges of using YouTube for teaching learning

MAJOR FINDINGS

- Ninety percentage of teachers viewed that YouTube can be used as teaching aid in classroom as it enhances the quality of teaching. More than 75% of teachers reported that YouTube can be used as supplementary resources because it allows students to see the video content repeatedly.
- More than 70% of teachers viewed that YouTube helps learner in achieving learning outcomes and increases students' engagement in learning. More than 60% of teachers reported that YouTube video simplifies complex concepts, hence it must be integrated in lesson plan and teaching.
- YouTube attracts and maintain student interest in learning is viewed by 87.5% of teachers. More than half of the teachers reported that YouTube video motivates students for learning, promotes professional development of teachers by facilitating. On the negative side, half of the teachers expressed that use of YouTube may develop poor reading habits in students.
- There are many challenges in using YouTube are expressed by more than half of teachers such as inappropriate and unreliable content, not suitable of for all learners, make students addictive, misleads, and develop poor sleeping habits.

DISCUSSION OF RESULTS

The findings indicated many positive aspects of YouTube video content as learning tool that can be utilized as teaching aid, supplementary materials, simplifying complex concepts etc. which are in consonance with the previous research findings. Gyeltshen & Dorji (2023) reported that YouTube serves as a valuable teaching aid, improving the quality of teaching and enhancing content delivery. Teachers recognize YouTube's benefits in improving the overall learning experience for students, as it allows them to access multimedia content multiple times for better understanding and retention. Abbas et al. (2020) indicated that YouTube acts as an essential tool in classroom as it attracts students and it develops mentality and creativity. Further, Almurashi (2016) acknowledges YouTube as an excellent supplementary learning resource. It provides additional support to classroom learning by offering diverse and engaging multimedia content that appeals to students' interests and enhances their learning experience.

On the other hand, teachers expressed many challenges and issues in using YouTube videos such as validity of the content, distraction by advertisement, developing poor reading habits, sleep disorder etc. Despite its benefits, integrating YouTube into classroom instruction poses challenges, as highlighted by Shoufan & Mohamed (2022). Inappropriate content, and difficulties in finding suitable educational

materials are common challenges faced by educators. This suggests that while YouTube offers benefits, it may not fully meet the diverse needs of all learners or completely replace traditional instructional methods. Several studies express concerns about the quality, reliability, and accuracy of content on YouTube. There is skepticism about the credibility of content, as well as concerns about potential biases and misleading information.

CONCLUSION

This study focused on YouTube as a learning resource for students and teachers. It is indicated that teachers see YouTube as a helpful tool for teaching, offering a wealth of resources to engage students and enhance learning experiences. Hence, students and teachers need to be oriented about process and purpose of using YouTube for teaching learning. Teachers and parents have great role to play in guiding students in the identification of valid and relevant YouTube channels that are related to school syllabus. Further, YouTube videos developed by the NCERT, SCERT, NIOS are very useful for students learning. Teachers must integrate these videos in their regular teaching and recommend students for learning in home. It is very much essential to create and use video lessons for YouTube channels for making quality learning accessible for all.

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