Impact of YouTube on Academic Enhancement and Educational Writing

Dr. Rajeshwari Jain
Visiting Faculty
Som-Lalit Institute of Management studies
Ahmedabad, India

Dr. Ranjani Srinivasan
Associate Professor
S.K.Patel Institute of Management Studies
Gandhinagar, India

Abstract:
In the digital era, a multitude of smart media has flooded classrooms with tools like ICT, gamification, Virtual Worlds (VWs), social media, m-learning, webcasts, podcasts and YouTube videos. But this digital environment demands a certain set of appropriate skills, which regulate the acceptability, adaptability, usability, accessibility aspects of both instructors and learners. The aim of this study is to measure the relative impact of YouTube videos on academic enhancement and educational writing. Data was collected on the differing perspectives of postgraduate students across five cities in India. The usage and extent of YouTube for academic and study purposes was recorded and analysed. The fundamental results indicate that though YouTube is generally informative, students are unable to find videos absolutely suited or specific to their curriculum concepts. YouTube assists in improving academic writing for Indian students but cannot be regarded as a replacement for classroom learning. The study recommends appropriate changes in existing pedagogy for academic enhancement. The results indicate that customised YouTube Videos developed on par with existing curriculum can greatly improve the learning curve and topic retention.

Key Words: YouTube, academic enhancement, educational writing, topic retention, post graduate students, gamification, ICT

Introduction
In the digital era, Digital Media has completely transformed how we teach, learn and present. A multitude of digital media has flooded classrooms with new tools like Virtual Worlds (VWs), gamification, social media, m-learning, webcasts, podcasts and YouTube videos. These media entail complex implications for all education stakeholders, regarding the form, content and means of education. (TAB, 2016). The tried and time-tested teaching methodology, where the lecturer delivers a lecture to a fairly passive audience of students, who merely write down what they are told has certainly proven its merit over the years, but it is simply not up to date anymore (Herck & Legay, 2017). The current generation of students and learners have great expectations from the teachers and instructors. They prefer more interactive form of learning, which can be delivered through tools like debates, presentations, videos, games etc. as it leads to better engagement of the students and enhanced learning. In recent years, research has proven that any learning delivered through the visual medium and experiential exercises have better retention rates with the learner when compared with the traditional method of book reading.

The advent of Digital/Multimedia in Education
With the infusion of ICT and gamification technology in the education sector, teachers/instructors have started making their sessions more interactive, and convey the subject concepts, through the incorporation of multimedia elements in their content. This has enabled a multi-sensory learning environment and fosters a number of innovative methods to communicate knowledge to the learners. But this also signifies that educators need to re-modify their approach to teaching, preparing content and delivering learning materials (Neo & Neo, 2004). Research on how digital
media and internet are transforming education in the USA has revealed that there is a crucial element of student’s enjoyment and effort in this new form of a learning experience. It has enhanced their critical thinking, problem-solving, and creativity under the well-planned guidance of teachers. Nevertheless, it is also a challenge for educators as they have to constantly review and design educational approaches and thus, support students while using the tools meaningfully and within a defined learning experience (Chien J, 2014). When it comes to digital media, the wide variety of options like videos, webcasts, podcasts, gaming lead to the question of which of these are more effective for the teaching/learning experience. Research on, when improved learning happens indicate that learners remember and understand better, when they see, hear and do. The level of student’s understanding when they see, hear and produce materials during instruction is higher than when the students only see during instruction. (Lindstorm, 1994). In this context learning with multimedia elements like videos has shown to be effective for learning activities; (Zahn, Pea, Hesse, & Rosen, 2010). Learners remember and understand better when they see, hear and do. The level of a students’ understanding of a subject when they see, hear and produce materials during instruction is higher (75%) compared to students who only see during instruction (20%), and see and hear only (40%) (Lindstorm, 1994).

**YouTube and Academic Learning**

Learning with multimedia elements, such as videos, have shown to be effective for learning activities. Learners are able to see, hear and produce the required behaviours. (Pea, Hesse, & Rosen, 2010). YouTube, TeacherTube and Vimeo are online video repositories where videos are available on various subjects. The users are able to download, view, and share video clips on a wide variety of content such as instructional videos, music, television shows, film clips etc. (Norlidah Alias, DeWitt, Saedah Siraj, 2013). At this juncture, it is imperative to note that while YouTube videos are shared, comments and other forms of interaction do occur on the site, where it becomes social media. A study on the potential of YouTube for teaching and learning in the performing arts has revealed that YouTube has the potential to be used as an instructional tool in the performing arts in line with current trends of collaboration and social networking in education. (Dorothy DeWitt et al., 2013). Duffy (2007), in the article on engaging the YouTube, Google eyed generation recommended that video learning should not be passive, rather it should have a purpose. He emphasized that for effective teaching, videos should be played in short segments, allowing the students to ask questions or think critically about the content they had viewed. He advised the frequent usage of the ‘Pause’ function in the video at regular intervals, to make the students recall what they had viewed or predict what might happen next in the video. He greatly recommended that there should be an accompanying activity to go along with the video in order to make the content more meaningful and clearer. YouTube videos assist students in developing various skills such as note taking and summarizing.

There are immense advantages of using YouTube in the classroom, still, it is vital that educators need to possess a complete understanding of YouTube, its features and develop meaningful ways to integrate it into the classroom. Andrea Wilson (2015) in her research on YouTube in the classroom, has recommended that it is not enough to provide educators with the resource, but they need to understand how to operate and utilize these resources to enable student learning, engagement and manage student behaviour. She also recommends that educators should make their own videos using applications such as iMovie or Camtasia as that would be more relevant and they would be more willing to do. Corroborating this view, another study revealed that it is important to understand how YouTube can be used, how it can be facilitated in the classroom and how educators can monitor the use of such a database. With respect to its use in the classroom, there are barriers like the specific usability of YouTube content, classroom management and the contradictions of this tool with the instructor’s own pedagogical orientation. (Krauskopf and Zahn, 2012).

The above discussion and review of the literature leads to the following research questions: -
Research Questions

- How can educators digitally manage students more effectively?
- Can YouTube really enhance learning for the students?
- Does YouTube supplement the traditional course delivery method or is it critical to it?
- Is YouTube mainly for arts and entertainment or can it be used extensively for educational search?
- Do educators use their own videos?

These questions form the foundation for the following Research Objectives:

Research Objectives:
1. To find out whether YouTube helps in academic writing or not.
2. To find out whether gender has any impact on the perceived value of YouTube on academic learning and educational writing.
3. To find out whether the preferred traditional course delivery method affects students’ usage of YouTube on academic learning and educational writing.
4. To find out whether inclusion of YouTube in teaching can make sessions more interesting or not.
5. To find out whether YouTube supplements the traditional course delivery method or is it critical to it.

Research Methodology:
This research is based on the key research questions derived from review of pre-existing literature available on the subject. Based on them the research questions were derived, which lead to the finalization of the research objectives. Based on these objectives a structured questionnaire was developed for the primary survey. For the primary survey, a total of 400 students from Post graduate management courses were selected as part of the research study. Non Probabilistic Sampling technique was used for the data collection. The sampling unit for the study was post graduate students. The survey was carried out on post graduate students across five cities namely Ahmedabad, Vadodara, Surat, Mumbai and Pune, across India. The structured questionnaire was administered to all the respondents and their responses were gathered. Different perspectives of students, using YouTube for the academic purpose was analysed and the extent to which they depend on YouTube for study purpose was recorded. The data collected were coded and analysed using appropriate statistical tools.

Findings and Discussion
The study revealed that 80.7% of respondents were in the age group of 21 to 25 years whereas 19.3% of respondents were in the age group of 19 to 21 years.
56.5% of respondents were female and 43.5% of respondents were male.
63.9% of respondents had specialized in commerce during their under graduation whereas 20.4% of respondents had specialized in business administration. The rest were divided between the Bachelor of Science, Bachelor of Management Studies, Bachelor of Arts, bachelors in pharmacy, bachelor in computer applications and a bachelor’s in technology.
57.4% of respondents were pursuing the course of a post-graduate diploma in management; whereas 22.2% of respondents were pursuing masters in business administration. The rest of the respondents were pursuing Masters of Management Studies.
67.9% of respondents were of the opinion that YouTube does help in understanding the concept better than educators whereas 32.1% of respondents cited that YouTube does not help in understanding the concept better than educators.
50% of respondents mentioned that it is very easy to research on any topic on YouTube, whereas 38% of them mentioned that it is easy to research on any topic. 10% of respondents stated that they faced moderate difficulty in researching on any topic on YouTube and only 2% of respondents cited that it was really difficult for them to research any topic on YouTube.
45% of respondents mentioned that it was very easy to download and save videos from YouTube, 30% of respondents mentioned that it was easy to download and save videos from YouTube, 20% of respondents cited that it was a little difficult for them to download and save videos from YouTube and the rest 5% cited that it was very difficult for them to download and save videos from YouTube.

35% of respondents cited that it was very easy to share YouTube videos across on different platforms. 41% of respondents cited that it was easy to share YouTube videos across on different platforms. 22% of respondents cited that it was moderately easy to share YouTube videos across different platforms whereas only a minuscule 2% of respondents mentioned that they found it difficult to share YouTube videos across different platforms.

19% of respondents mentioned that it was very easy to find good content on YouTube, 23% of respondents cited that it was easy to find good content on YouTube, 44% of respondents cited that it was difficult to find good content on YouTube and the remaining 4% of respondents cited that it was very difficult to find good content on YouTube.

7.4% of respondents surveyed mentioned that they think YouTube is suitable for arts and entertainment only whereas the remaining 92.6% of respondents mentioned that YouTube has more to offer than arts and entertainment.

82.4% of respondents cited that YouTube helped a lot in writing subject-based assignments whereas 17.6% of respondents cited that YouTube does not help much in writing subject-based assignments.

60% of respondents surveyed mentioned that YouTube is a supplement to classroom-based academic learning process whereas 40% were of the opinion that YouTube is critical to the classroom-based academic learning process.

67.6% of respondents surveyed mentioned that they never used YouTube more than books for learning purpose whereas 32.4% of respondents surveyed mentioned that they used YouTube more than books for learning purpose.

67.6% of respondents surveyed mentioned that due to YouTube videos aspects such paraphrasing sentences and mind mapping of concepts became much clear to them whereas 32.4% of respondents surveyed mentioned that YouTube didn’t contribute much in paraphrasing sentences and mind mapping of concepts.

32.1% of respondents mentioned that they did rely more on YouTube videos for learning whereas 67.9% of respondents mentioned that they did not rely on YouTube videos for learning. In other words, respondents mostly preferred the traditional method of learning as classroom teaching and group learning helped them understand the concepts better.

**Statistical Analysis:**

Hₐₒ: YouTube does not contribute much in academic writing
Hₐ₁: YouTube contributes immensely in academic writing

In order to test Hₐₒ about “YouTube does not contribute much in academic writing” respondents were asked to respond to a scaled agreement question. Accordingly, 82.4% of respondents cited that YouTube helped a lot in writing subject-based assignments whereas 17.6% of respondents cited that YouTube is of little help in writing subject-based assignments. From this interpretation one can conclude that YouTube does contribute immensely in academic writing.

<table>
<thead>
<tr>
<th>Table 1: Whether YouTube Helps in Academic Writing or Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>YouTube helps a lot in academic writing</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>Standard Deviation</td>
</tr>
<tr>
<td>Confidence@95%</td>
</tr>
</tbody>
</table>
H$_{02}$: Gender has no impact on the perceived value of YouTube on academic learning and educational writing

H$_{12}$: Gender has an impact on the perceived value of YouTube on academic learning and educational writing

As seen in table 2, a minor attitudinal difference is reported between male and female students regarding the use of YouTube in learning and educational writing. The interpretation of these results suggests that both male and female students perceive the use of YouTube positively as an enhancement to teaching and learning.

<table>
<thead>
<tr>
<th>Gender * Cross tabulation</th>
<th>Does YouTube help in writing subject assignments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>209</td>
</tr>
<tr>
<td>Female</td>
<td>9</td>
<td>172</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: ANOVA</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>.328</td>
<td>1</td>
<td>.328</td>
<td>1.314</td>
<td>.254</td>
</tr>
<tr>
<td>Within Groups</td>
<td>26.232</td>
<td>105</td>
<td>.250</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26.561</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Here as seen in table 3, if the ‘F’ probability value is less than 0.05, we reject the null hypothesis at 95% confidence level that gender has no impact on academic learning and educational writing. Here the probability value of ‘F’ is 0.254. Therefore, we accept the null hypothesis and conclude that there is no significant difference in the perceived value of the use of YouTube to enhance learning, based on gender.

H$_{03}$: The Preferred Course Delivery Method does not affect student’s usage of YouTube in Academic learning and educational writing.

H$_{13}$: The Preferred Course Delivery Method definitely affects student’s usage of YouTube in Academic learning and educational writing.

Respondents were asked to indicate their preferred course delivery format. 26% of respondents indicated a preference for teaching completely using technology, 54% indicated a preference for a hybrid method of teaching which meant both the instructor and technology usage and 20% indicated a preference for only instructor-based teaching. An Anova was performed to examine the differences in the responses based on preferred course delivery format. As supported by table 4, the results indicate that the P value is less than 0.05, hence we reject the null and accept the alternative hypothesis. Thus we can conclude that the students do supplement the traditional course delivery method with YouTube for their academic learning and educational writing.
Table 4: Students preference of course delivery method

<table>
<thead>
<tr>
<th>Which type of course format do you prefer?</th>
<th>Teaching completely using technology</th>
<th>Teaching using both instructor and technology</th>
<th>Only instructor-based teaching</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.17</td>
<td>3.22</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.90</td>
<td>0.901</td>
<td>0.905</td>
<td></td>
</tr>
<tr>
<td>ANOVA SS</td>
<td>6.768</td>
<td>2</td>
<td>3.345</td>
<td>3.98</td>
</tr>
<tr>
<td>Between</td>
<td>173.02</td>
<td>213</td>
<td>0.823</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>179.788</td>
<td>215</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

H₄: Inclusion of YouTube in teaching does not make sessions more interesting.
H₁: Inclusion of YouTube in teaching makes sessions more interesting.

Respondents were asked to indicate whether YouTube in teaching helps to make the sessions interesting or not. As supported by table 5, 89% of respondents cited that inclusion of YouTube in teaching helps make the sessions interesting. Whereas 11% of respondents cited that inclusion of YouTube in teaching does not help in making the sessions interesting.

Table 5: Whether inclusion of YouTube in teaching makes sessions interesting or not

<table>
<thead>
<tr>
<th></th>
<th>Inclusion of YouTube in teaching makes sessions interesting</th>
<th>Inclusion of YouTube in teaching does not make sessions interesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.23</td>
<td>2.03</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.766</td>
<td>0.787</td>
</tr>
<tr>
<td>confidence@95%</td>
<td>0.0411</td>
<td>0.034</td>
</tr>
</tbody>
</table>

Conclusions and Recommendations

- The study presented in the current paper examined student perceptions with respect to the value and usefulness of YouTube as a pedagogical tool. It was found that students perceive that the incorporation of YouTube enhances instruction and increases interest, engagement, and discourse.
- The findings reveal that there is a necessity to integrate Information Technology into the teaching-learning process. Incorporation of YouTube videos in the instructional process can certainly contribute to this.
- In the context of teaching and learning, one can conclude that YouTube is used as a video repository by both lecturers and students. From the student’s perspective, YouTube is certainly facilitating them in their learning and preparation of class assignments. However, it is important to note that students are not able to accomplish conceptual clarity by using YouTube. For this, they still rely on the traditional course delivery format. So, with respect to student learning one can conclude that presently in India, YouTube is only a supplement to the traditional course delivery method and book-based learning. Here the recommendation for instructors would be that YouTube should be more creatively and innovatively included in the instructional content in the classroom, such that it becomes a tool for enhanced learning.
- It is recommended that using an interesting and congruent video at the beginning of the class can have a positive impact on the learning retention of the students.
- Thus, lecturers/instructors must keep pace with the needs of the present generation of students but at the same time, efficient teaching methods should be practised to specifically deal with the issue of learning retention of students.
• Curriculum planners and implementers should consider the integration of the subject with information technology and develop information technology skills among lecturers and learners.

• In addition, the effectiveness of YouTube can be studied to determine its strengths and weaknesses in the priority areas in education.

Limitations
The most significant limitation of this study is that it focused majorly on students pursuing management courses. Increasing the size of the student population, expanding it across disciplines, integrating multiple institutions of higher education, as well as incorporating faculty members serving in institutions would enhance the study.

Implications for Future Research
The continued exploration into the use of YouTube in the instructional process is required. Additional studies may seek to explore the impact on course grades, student performance, and/or course retention.

References


Michikyan, M.Krauskopf, K., Zahn, C., & Hesse, F. W. (2012). Leveraging the affordances of Youtube: The role of Pedagogical Knowledge and mental Models of Technology functions for lesson


