

students who search for an authentic source of information.

The ways search engines and/or Web 2.0 applications exploit social signals are usually not disclosed; however, social features are promising to improve the retrieval performance⁽³⁰⁾. YouTube is the world's second largest search engine; however, unlike many professionally oriented databases, such as those used for peer-reviewed publications, the search engine utilized by YouTube allows for only a limited degree of search control since it is not best calibrated for searching educational content. Thus, some videos with high-standard educational quality content might not appear on the top of the list^(26,31).

Given the lack of regulation of such videos, it is likely that a proportion of online resources are still of poor quality with substantial educational flaws. The student should be observant to quality and not be misled by low-standard educational content videos. Educators can help the student by recommending a short list of relevant videos to the topic under discussion. However, this process, while time-saving to the student is cumbersome to the teacher⁽²³⁾.

Educators should set criteria for rapid selection of a short list of relevant videos by using objective and subjective parameters. For objectivity, you may use video information metrics which include the page number on which the video was located in the search results (each page contains 20 videos), duration, date the video was uploaded, number of views, video category, and engagement parameters extracted from video statistics including likes, dislikes, comments and favourites.

Other objective information includes those related to the channel on which the video is uploaded. Channel information includes number of subscribers, channel views, number of uploaded videos on the channel, and whether the channel is dedicated for educational videos or not.

The page number indicates the relevance of the video to the search keywords and thus those found on the first page are more likely to be

seen than those on lower pages. Number of video views provides an indication of the popularity of the video. The date the video was uploaded can give an idea about the number of views/day because recently uploaded videos will have lower total views than older videos and this might not serve as a comparative criterion to reflect popularity and usefulness. The engagement criteria are an indication of the concern of the viewer who might reflect on the video by liking, commenting, or adding to his favourites. It has been shown that for every 'dislike,' we get 10 'likes'- people like to tell other people about the stuff they love⁽¹⁹⁾. Camm et al., 2013 used a "like/dislike" ratio of 0.9 as a cut off for rating videos. This ratio is calculated by the number of likes divided by the total number of likes/dislikes⁽²⁶⁾. The number of comments per se might not be a reliable indicator of a positive feedback because some comments might reflect a negative impact.

A brief analysis of the channel to which the video belongs provides a better insight on the video owner. Institutions and some educators may have established dedicated channels for teaching. On the other hand, some students have established such channels for their colleagues. Others might have mixed educational and non-educational content, this reflects non-dedication to education.

The number of uploaded videos, channel views, and subscribers are a good indicator of the owner's work in general. Some channel owners are sporadic producers who have produced the videos once and never added to them. The number of channel views is a collective figure of the views of all videos on the channel. It can be considered as a good reflection of the quality of the channel videos even though the particular video has not by itself attained high level indicators. The number of channel views is another reliable indicator of the quality of the owner's videos in general. However, in non-dedicated channels the above-mentioned channel indicators are not reliable in reflecting video or channel quality since the number of channel views or subscribers might have been