Introduction:
YouTube is a video-sharing website, created by Chad Hurley, Steve Chen, and Kari, a former PayPal employees in February 2005, on which users can upload, view and share videos. The company is based in San Bruno, California, and uses Adobe Flash Video and HTML5 technology to display a wide variety of user-generated video content, including movie clips, TV clips, and music videos, as well as amateur content such as video blogging and short original videos. Most of the content on YouTube has been uploaded by individuals, although media corporations including CBS, the BBC, VEVO, Hulu, and other organizations offer some of their material via the site, as part of the YouTube partnership program. Unregistered users can watch videos, while registered users can upload an unlimited number of videos. Videos considered to contain offensive content are available only to registered users at least 18 years old. In November 2006, YouTube, LLC was bought by Google for US$1.65 billion, and now operates as a subsidiary of Google.

Features: Video technology
Playback:
Viewing YouTube videos on a personal computer requires the Adobe Flash Player plug-in to be installed on the browser. The Adobe Flash Player plug-in is one of the most common pieces of software installed on personal computers and accounts for almost 75% of online video material. In January 2010, YouTube launched an experimental version of the site that uses the built-in multimedia capabilities of web browsers supporting the HTML5 standard. This allows videos to be viewed without requiring Adobe Flash Player or any other plug-in to be installed. The YouTube site has a page that allows supported browsers to opt in to the HTML5 trial. Only browsers that support HTML5 Video using the H.264 or WebM formats can play the videos, and not all videos on the site are available.

Uploading:
All YouTube users can upload videos up to 15 minutes in duration. Users who have a good track record of complying with the site’s Community Guidelines may be offered the ability to upload videos of unlimited length, which requires verifying the account, normally through a mobile phone. When YouTube was launched in 2005, it was possible to upload long videos, but a ten-minute limit was introduced in March 2006 after YouTube found that the majority of videos exceeding this length were unauthorized uploads of television shows and films. The 10-minute limit was increased to 15 minutes in July 2010.

3D videos
In a video posted on July 21, 2009, YouTube software engineer Peter Bradshaw announced that YouTube users can now upload 3D videos. The videos can be viewed in several different ways, including the common anaglyph (cyan/red lens) method which utilizes glasses worn by the viewer to achieve the 3D effect. The YouTube Flash player can display stereo-oscopic content interleaved in rows, columns or a checkerboard pattern, side-by-side or anaglyph using a red/cyan, green/magenta or blue/yellow combination. In May 2011, an HTML5 version of the YouTube player began supporting side-by-side 3D footage that is compatible with Nvidia 3D Vision.

Content accessibility
YouTube offers users the ability to view its videos on web pages outside the site. Each YouTube video is accompanied by a piece of HTML, which can be used to embed it on a page outside the YouTube website. This functionality is often used to embed YouTube videos in social networking pages and blogs. Embedding, as well as ranking and commenting, can be disabled by the video owner. YouTube does not usually offer a download link for its videos, and intends for them to be viewed through its website interface. A small number of videos, such as the weekly addresses by President Barack Obama, can be downloaded as MP4 files. Numerous third-party web sites, applications and browser plug-ins allow users to download YouTube videos. In February 2009, YouTube announced a test service, allowing some partners to offer video downloads for free or for a fee paid through Google Checkout.

Why Use YouTube in your classroom?
Increase student engagement:
• Start your class off with an engaging video clip that brings a lesson to life and sparks a lively discussion.
• Students will actively engage with video clip
• Make the subjects applicable to your students’ everyday lives by showing culturally relevant YouTube clips.
• Teach students video production and editing skills through projects and upload the videos to your classes YouTube channel.

Free Access to thousands of high quality educational videos
• YouTube provides free, unlimited access to tens of thousands of videos of high quality educational content.
• These videos range from the world’s best professors giving hour long lectures to great teachers giving short lessons.
Teach to every type of learner
• Tap into the mind of the visual learner.
• Each student has different learning needs. You can create videos or playlists to suit the different types of...
learners in your classroom.

- On YouTube you can find videos explaining the same topic, many different ways.

Spark Lively Discussions
Engage students by showing a video relevant to their lives. Video clips can bring in different perspectives or force students to consider a new viewpoint, helping to spark a discussion. Check out this Science video as a great example.

Organize all the great video content you find
Playlists are YouTube’s way of allowing you to organize videos on the site: a playlist is a series of videos you put together - they don’t have to be videos you uploaded, and you get to choose the order. When one video ends, the playlist plays the next video without offering ‘related videos’, thus creating a curated environment for your students. Therefore, by creating playlists of videos you can select which YouTube videos you want your students to view. Watch the Dynamic Earth Processes playlist for a good example.

Archive your work
Capture and save projects and discussions so you can refer back to them year after year. This will also help you save time as you can assign old videos to your new students.

Allow students to dig deeper into a subject
Give students the option to dig deeper into a subject by creating a playlist of videos related to that concept. By creating playlists of relevant videos you allow students to pursue their interests without wasting their time searching for information (or finding potentially objectionable content).

Get struggling students up to speed, and push strong students ahead
Videos (or playlists) can help supplement in class teaching for struggling students. Students can review them at home. YouTube user piazza lexis created videos aligned with the state standards so students who needed to review a particular standard could get the help they needed.

Create a YouTube center in your classroom
When working in Classrooms, have students use your YouTube channel to complete an assignment, freeing you up to work with small groups of students. Divide your class into groups and have them rotate through different stations. At the YouTube station, introduce students to new information, allowing you to help students practice their new found skills.

Create quizzes to accompany videos for instant feedback
Create a Google Form that students complete after watching a video. You can use this quiz to get instant feedback on what they’re learning. Embed your quiz on a class blog or site so students can watch a video and complete the quiz at the same time.

Flip your classroom
If your students watch a video of the basic concepts at home you can focus in class on applying those concepts, working collaboratively with their classmates rather than simply listening to you lecture.

Operational definitions:
YouTube is a video-sharing website, where the content related to the subjects can be viewed with the help of video.

eos. The YouTube can be made use of Teaching-learning situations at Teacher Education for the Effective and Innovative Teaching Strategy.

DEVELOPMENT OF OPINIONNAIRE:
The Investigator has decided to construct and standardize an Opinionnaire on YouTube for Teaching-learning. As the first step the investigator has collected variety of information regarding Use of YouTube on Teaching-learning process from Internet search. The respondents for the Opinionnaire were the Teacher Educators working in Teacher Education Colleges of Bangalore city. After a thorough study of the available information towards YouTube, total 35 items were drafted. The draft was presented to 300 Teacher Educators working in Teacher Education Colleges of Bangalore city and their suggestions were incorporated. Some of the items had to be deleted from the draft and finally 15 items were included in the final tool. The unanimity of the Experts about the items was taken to be indicative of the internal consistency of the Opinionnaire. Each statement is set against YES /NO and each (√) for YES is given one marks and each (x) for NO is not given any Marks.

Try out of the Opinionnaire: The Opinionnaire of items/statement selected for the study was administered to the sample of as many as 300 Teacher Educators working in Teacher Education Colleges of Bangalore city. Then their responses have been scored carefully and based on their opinion and the suggestions. Then the items were limited only to 15 and remaining statements were omitted based on the difficulties, vocabulary and irrelevance.

Scoring procedure: Each statement is set against YES /NO and each (√) for YES is given one marks and each (x) for NO is not given any Marks.

Validity of the Opinionnaire: The items were selected on the basis of the scrutiny by the experts about the intended content of YouTube for Teaching-Learning. Therefore the content validity for the tool is presumed to be present. The items selected for the final tool were based on the item analysis on a sample of 300 Teacher Educators working in Teacher Education Colleges of Bangalore city. Therefore, this Opinionnaire is deemed to be valid.

Use of the Opinionnaire on YouTube for Teaching-Learning:
Opinionnaire on YouTube for Teaching-Learning can safely be used on Teachers and Teacher Educators working in Colleges/ Universities i.e., (Age group 25+ to 60+).

Norms: As a Result of Administering Opinionnaire on YouTube for Teaching-Learning on a sample of 300 Teacher Educators working in Teacher Education Colleges of Bangalore city. The given category indicates the Opinionnaire on YouTube for Teaching-Learning and the category wise classification as percentile norms was done.

The following table presents the classification:

<table>
<thead>
<tr>
<th>Scores</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>Highly unfavourable Opinion towards YouTube for Teaching-Learning</td>
</tr>
<tr>
<td>5-10</td>
<td>Favourable Opinion towards YouTube for Teaching-Learning</td>
</tr>
<tr>
<td>10-15</td>
<td>Highly Favourable Opinion towards YouTube for Teaching-Learning</td>
</tr>
</tbody>
</table>

The maximum scores in Opinionnaire are 15 and the scores classified in the percentile norms indicate as follows:
Highly Unfavourable Opinion: Typifies Opinion towards YouTube for Teaching-Learning is lower than ordinary one.

Favourable Opinion: Refers Opinion towards YouTube for Teaching-Learning is Superior than Average one.

Highly Favourable Opinion: Refers Opinion towards YouTube for Teaching-Learning is Outstanding which is Worth Appreciable and mentioning.