SUBJECT-SPECIFIC TOOLS SOCIAL SCIENCES

Integration of ICT in Teaching-Learning Process & Creation of eContent

Dr. Nidhi Singh
Assistant Professor of Geography
Amity University, Noida, U.P.



Introduction

- What?
- Why?
- •Whom?
- •How?

WHAT?

- Purpose
- Theme/Topic to be covered
- Conceptualisation

WHY?

- Need/purpose
- Advantage over traditional way of teachinglearning



FOR WHOM?

- Target group
- •For which- Target area/subject

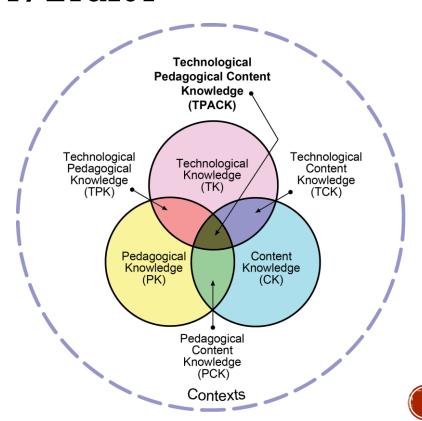
HOW?

- Type of resources/e-content
- Tools used

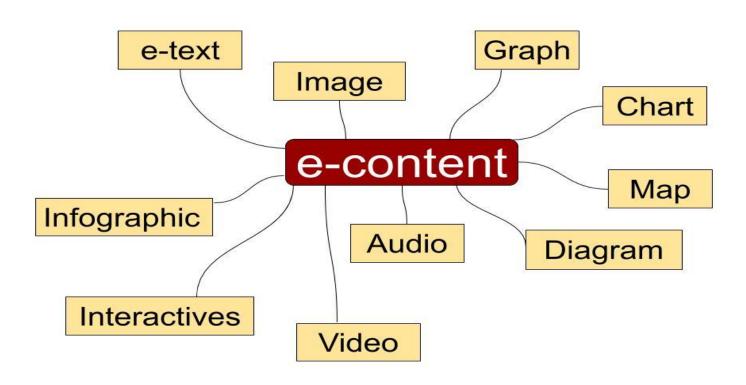
INTEGRATION OF TECHNOLOGY/ET&ICT

TPACK

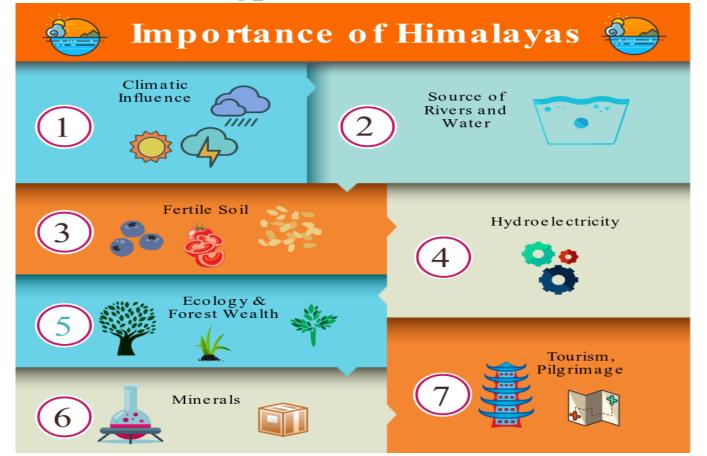
Describes kinds of knowledge required by teachers for successful integration of technology in teaching



Types of eContent



Type of eContent



eCONTENT DEVELOPMENT

ADDIE Model

Generic process traditionally used by instructional designers and training developers



- Analysis
- Needs, requirements, tasks, participants' current capabilities



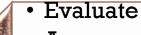
- Design
- Learning objectives, delivery format, activities & exercises



- Develop
- Create a prototype, develop course materials, review, pilot session



- Implement
- Training implementation, tools in place, observation



Awareness, knowledge, behaviour, results



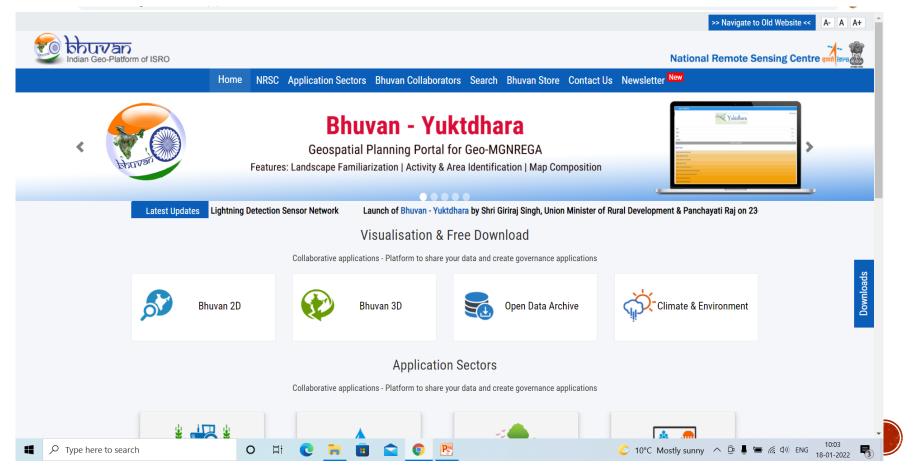
SOCIAL SCIENCE TOOLS

- Bhuvan
- Marble KDE
- Google earth
- OGIS
- Mapchart.net
- Trophy
- Visme, FusionCharts, Google Chart
- Windy.com
- Stellarium
- Sutori
- flightradar24.com
- Google Arts & Culture

- Old Maps Online
- Google Cardboard
- Other generic tools- Audacity, Openshot video editor, easel.ly, Canva, animation tools, etc.
- Games-National Geographic Kids, GEOGUESSR, Google Arts & Culture etc.
- Songs on topics Marais & Miranda-Nature Songs, balance of nature, how is silk made, parts of a tree, etc.

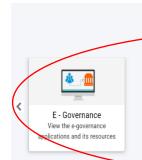


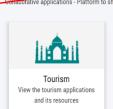
BHUVAN

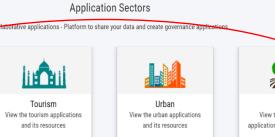


Bhuvan

contd...









Maps & OGC Services

Collaborative applications - Platform to share your data and create governance applications





Ocean Services





Create a Map

My Map | My GIS

Bhuvan Central Applications

Collaborative applications - Platform to share your data and create governance applications



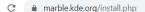








MARBLE KDE



Marble

Features

Documentation

Support



Developers -

Linux Desktop



Marble packages are released together with many other KDE Applications and packaged in all major Linux distributions. Please use the package manager of your distribution for installation.

Debian: marble Linux Mint: marble

Gentoo: kde-base/marble

Ubuntu: marble Fedora: marble openSUSE: marble

marble Arch Linux: marble

☐ Marble Maps Android



Marble Maps brings the highly detailed OpenStreetMap to your Android devices. It features a crisp, beautiful map with an intuitive user interface. We designed the map style to resemble the OSM standard tile layer, while introducing more vivid colors with a responsive selection of map features. Calculate routes to any destination and have Marble Maps guide you with its turn-by-turn navigation feature.



If you do not want to use the Google Play Store, you can download an APK or build the package yourself.

Behaim Globe Android

Activate V Go to Setting

MARBLE CONTD...

marble.kde.org/features.php

Marble

Features Documentation

Support

Instal

Developers

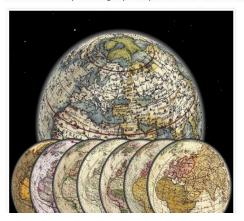
Explore the neighborhood with Marble's rich set of city and street level maps. Search for addresses and places of interest. Marble takes care of querying various search backends and presents their results in a unified view. Calculate pedestrian, bike and motorcar routes with ease — online and offline, with an arbitrary number of via points.



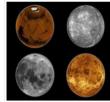




Start exploring the world. View clouds and sun shadow, follow satellites and space stations and display their orbits, all updated in real-time. Travel back in time and learn about historic views of our planet using maps from past centuries. Earth is not enough? Marble also offers maps of the moon and other planets.













Atlas

A classic topographic map.

It uses vector lines to mark coastlines, country



OpenStreetMap

A *global roadmap* created by the OpenStreetMap (OSM) project.



Satellite View

Earth as seen from Space.

The map is based on NASA's beautiful "Blue



Behaim Globe 1492

Martin Behaim's *Erdapfel* is the oldest existent globe of the Earth. *Credits: Germanisches*Nationalmuseum, Nuremberg, License: CC BY-SA



Earth at Night

This image of Earth's city lights was created with data from the Defense Meteorological Satellite Program (DMSP) Operational Linescan System



Historical Map 1689

Historical world map from the year 1689 created by G. van Schagen in Amsterdam.



Plain Map

A plain map.

It uses vector lines to mark coastlines and country

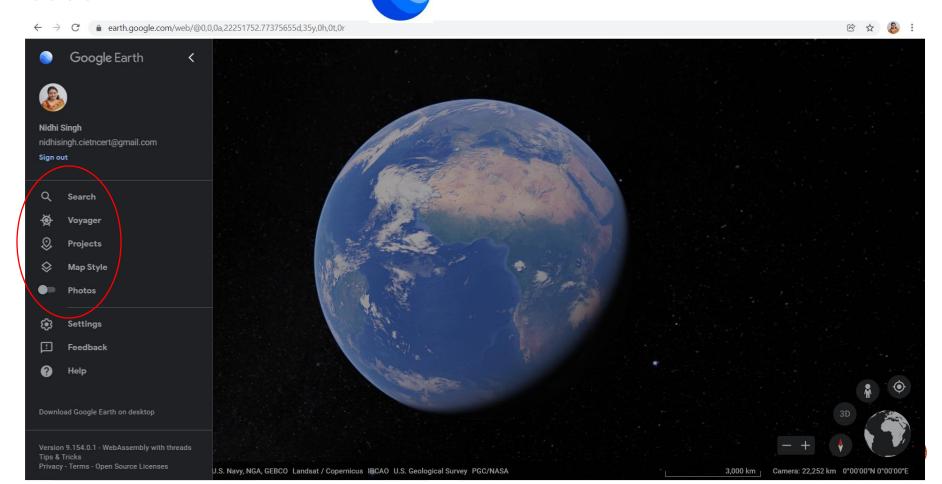


Political Map

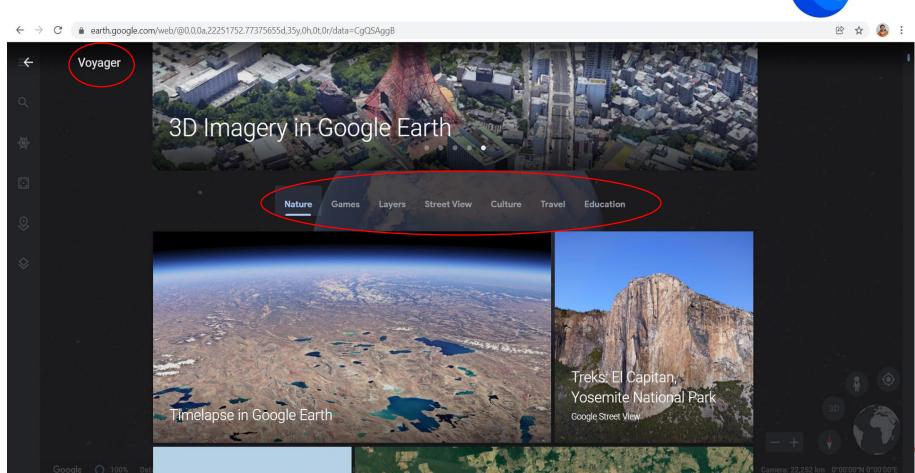
A Political Map.

The theme displays various countries.

GOOGLE EARTH



GOOGLE EARTH CONTD...



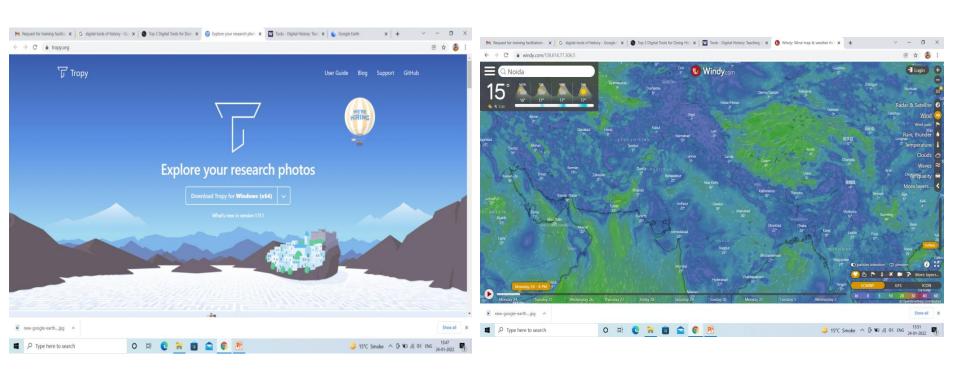
QGIS





TROPHY

Windy.com

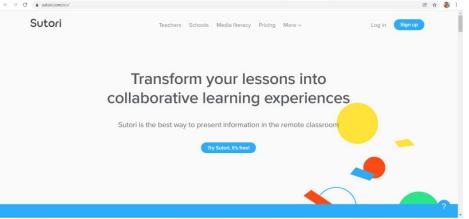




STELLARIUM

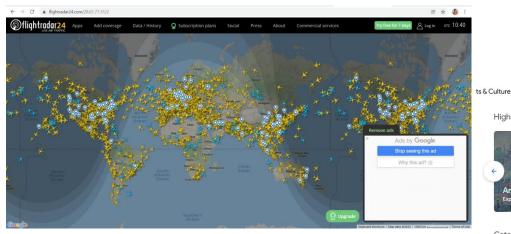
Sutori







FLIGHTRADAR24

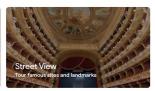




Highlights







Categories

Artists







Mediums



Art Movements 124 art movements

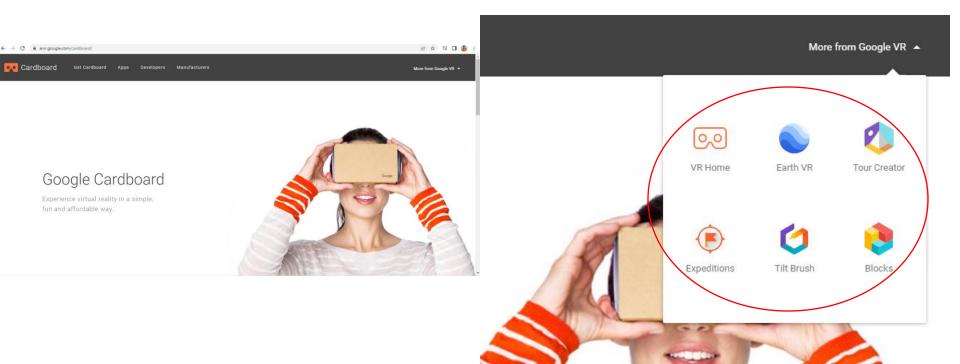


Historic Events 631 historical events



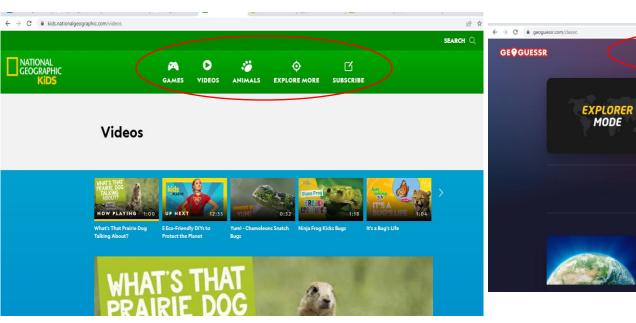
Historical Figures 8.586 historical figures

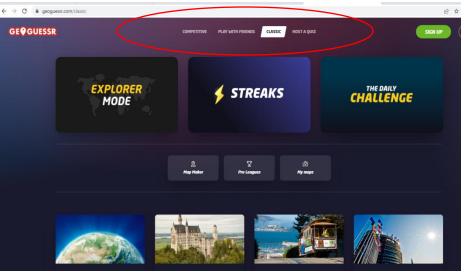
GOOGLE CARDBOARD



NATIONAL GEOGRAPHIC KIDS

GEOGUESSR



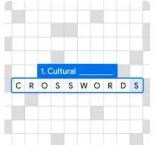




Pick a game to play





















Suggested references

NCERT Official YouTube Channel (Playlist → Webinar ICT tools)

- Marble (English): https://www.youtube.com/watch?v=liFTkLRIhRQ&list=PLUgLcpnvlYifllGMIrcqddoB0vRwGgJOi&index=536&t=714s
- Marble (Hindi): https://www.youtube.com/watch?v=VDEzx1Z_rc&list=PLUgLcpnv1YifllGMIrcqddoB0vRwGgJOi&index=316
- Google Earth (English):
 https://www.youtube.com/watch?v=ioAEesB6XZ8&list=PLUgLcpnv1YifllGMIrcqddoB0vRwGgJOi&index=534
- Google Earth (Hindi): https://www.youtube.com/watch?v=yEyziMQEf_w&list=PLUgLcpnv1YifllGMIrcqddoB0vRwGgJOi&index=218
- QGIS (English): https://www.youtube.com/watch?v=pr9Jm_Cbtiw&list=PLUgLcpnvlYifllGMIrcqddoB0vRwGgJOi&index=538
- QGIS (Hindi): https://www.youtube.com/watch?v=UA4BWUMfLQc&list=PLUgLcpnvlYifllGMIrcqddoB0vRwGgJOi&index=257
- NAVIC: https://www.youtube.com/watch?v=ZHWuoJTCKHE&list=PLUgLcpnv1YifllGMIrcqddoB0vRwGgJOi&index=101



Suggested readings

- NCF: Foundational Stage & School Education <u>National Curriculum Framework for School Education 2023 | Government of India, Ministry of Education</u>
- NCF 2005 Position papers-Teaching of Social Sciences (https://ncert.nic.in/pdf/focus-group/social-sciencel.pdf)
- NCF 2005 Position papers- Educational Technology (https://ncert.nic.in/pdf/focus-group/educational-technology.pdf)
- Strategies to regulate content development and interactivity in the classroom, Isabel Gómez Alemany and Teresa Mauri Majós, European Journal of Psychology of Education, Vol. 15, No. 2 (JUNE 2000), pp. 157-171 (15 pages), Published By: Springer
- Information and Communication Technology (ICT): Its Origin in India and Pedagogical Integration in the Study of Geography, Nidhi Singh (https://imanagerpublications.com/index.php/article/15975) DOI: https://doi.org/10.26634/jet.16.1.15975



Thank you

