



# MISSION: ASSESSING SEARCH ENGINE SKILLS

## "Mastering search engines"

”Once a person stops searching for information and self-knowledge, ignorance sets in.  
R. T. Kiyosaki

CONTEXT

What? →

Where? →

To whom? →

A two part course to develop data retrieval skills. In first part students learn to search data goal-orientedly, systematically and efficiently. In the second part they learn to evaluate reliability of the information.

Finnish high school system, Kuusankoski high school in the city of Kouvola

1st year students. This course is most beneficial when studied in the beginning of high school studies. Skills learned will help especially in general studies (history, philosophy, biology etc)



## Presurvey

BEFORE

Inquiring students on Google search tools they are familiar with. Students can see other students' results and teacher gets valuable data which helps emphasizing areas that are not familiar to students. If many students indicate they for example know how to use photo search, teacher will test these skills summatively



## Objectives and activities for part 1

Loooooots of stuff here...

- ✓ Learning about the **starting point of an effective data searching** online
  - ★ Planning data search by creating mind/concept map with digital tool such as Coggle, Draw.io or Cmap. Peer-reviewing others' work and reflecting how plan takes the learnt content into account.
- ✓ Learning **how search engines work**
  - ★ Multichoice questions based on the learning material
- ✓ Understanding the **limits of search engines** and learning to **critique** monopolization of search engine
  - ★ a) Reading a critical writing on Google and giving short answers to different questions.
  - ★ b) Watching a youtube video on search engine manipulation and censorship and answering questions on the themes presented in the video
- ✓ Learning to use the **most common search operators**
  - ★ Watching a youtube video on search tips and parameters and trying/mimicing them out. Reporting on open a course forum. Every student comments two reports.
- ✓ Using wide variety of Google **search tools** and **modifying** search related settings in browsers
  - ★ Google basic search: reading and watching the material, answering questions
  - ★ Google photo search: finding a photo with given criteria and posting it to forum
  - ★ Google photo search: finding the source of a photo with reverse photo search
  - ★ Google search settings: modifying settings and writing short comments on what student did. Answers are seen by all the students.
- ★ Google Scholar: making a search relevant for students' other ongoing high school courses. Returning assignment in the digital learning environment.
  - ★ Combined Google advanced search and data organizing exercise. Searching data on topic chosen by student , taking screenshots on search parameters and reflecting finally how the search went
- ✓ Learning different ways of saving and organizing search results
  - ★ Combined Google advanced search and data organizing exercise. Searching data on topic chosen by student , taking screenshots on search parameters and reflecting finally how the search went

AFTER

## Final exercise

In the end of the part 1 there is a final exercise in which student can test his or hers data searching skills by choosing three "Google a Day" -challenges according to ones interest (topics: culture, geography, history and sciences). Students will post descriptions on their data search processes to a discussion forum in the learning environment.

## Who evaluates

All the assignments are checked by **teacher** but the main feedback is coming from other students. Most of the work is posted to all the group so **peer-reviewing** is possible to carry out according to the readiness of the group. Some of the exercises are built to **automatically check** the right answers. The final exercise will be evaluated most strictly of all the assignments it being a good implication of learning during the course. Summative test works in this occasion well because we are learning a spesific set of technical skills.

Peers

Teacher

System

Self-evaluation still needs elaboration

## Evaluating standards

The course will be evaluated in scale pass/fail. If student does all the exercises given during the course and has not shown total lack of interest in learning, they will pass. This makes motivating students to deep learning challenging. Teacher presence in online environment has a vital part in fostering good discussions and monitoring interaction between students

Pass/  
Fail

Motivating through interesting course materials and good pedagogics

## Assessing specifics

Teacher will participate in every discussion during the course and will monitor all the action. Automatically revised exercise -types helps teacher with the workload.

Goal: sustainable assessment which includes assessing starting level, learning and finally skills