

NTK

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Národní technická knihovna
National Library of Technology

Introducing Your Students to the World of Information

30.11.2021

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Agenda

- Information support in NTK
- Student essays support:
 - Main challenges for both students and teachers
 - Searching for resources
 - Evaluating resources
 - Citing and referencing
- Open discussion (save questions for later please!)



Information Support in NTK

What do we do and why

Areas of help:

- Searching and evaluating information
- Citing
- Academic writing

For whom?

- High schools – teachers, students
- Undergraduate and graduate students
- PhD students, researchers
- ... or anybody else



Information Support in NTK

What do we do and why

Consultations

- For students, teachers and researches alike
- In person or online



[Schedule a Consultation](#)

Workshops

- Searching and evaluating information
- Citing
- Tips for writing theses
- Other topics



[WS for University Students
\(in Czech\)](#)

[WS for High Schools](#)

Information Support in NTK

What do we do and why

Materials "Made in NTK"

- [Information resources and teaching materials for Chemistry teachers](#)
- [Information resources and teaching materials for Biology teachers](#)
- Model student essays (Czech): [Humanities](#) and [Science](#)
- [Tutorials](#)
- [Subjects guides](#)
- [Video tutorial on thesis writing for university students](#) (helpful for essay writing as well)

3 PRAKTICKÁ ČÁST

V praktické části jsem se zabývala výsadbou, hnojením a sběrem plodů. Popis těchto fází je seřazen chronologicky podle toho, jak následovaly.

3.1 Výsadba a identifikace vzorků

Jelikož v průběhu mé práce mohlo dojít k poškození nebo uhynutí jednotlivých rostlin, rozhodla jsem se tomuto riziku předejít a testovat větší množství vzorků – **vždy 3 rostliny od každé skupiny**. Druhým důvodem bylo zvětšení skupiny pro omezení vlivu náhody při pozorování jejich výnosnosti.

V zahradnictví jsem zakoupila 9 stejně vzrostlých sazenic rajčete jedlého, odrůdy Tornádo F1 (viz obrázky 2 a 3). Všechny rostliny byly stejně vzrostlé a nejevily známky poškození.

V první fázi jsem rozdělila sazenice do 3 skupin po 3 rostlinách. Každou rostlinu jsem zasadila do zvláštní nádoby z toho důvodu, aby nedošlo ke kontaktu s jiným hnojivem. Pro všechny vzorky jsem použila stejný substrát a umístila je do závětrí s orientací na jižní světovou stranu.

Jednotlivé nádoby jsem označila štítkem s popisem, aby nedošlo k záměně vzorků. První skupina hnojena žižalim čajem je označena písmenem A, tzn. vzorky A1, A2 a A3. Druhá skupina hnojena výluhem ze slepičího trusu je označena písmenem B, tzn. vzorky B1, B2 a B3. Poslední skupina X, tzn. X1, X2 a X3 slouží jako kontrolní a není hnojena vůbec. Cílem kontrolní skupiny je stanovit standard, od kterého se bude odvíjet mé srovnání.



Obrázek 2 Tomato plant, zdroj: Gary K. Smith (2010)



Obrázek 3 Sazenice rajčete, zdroj: Pavlína Tassanyiová (2018)

Důvody pro testování více vzorků uvádím proto, aby bylo jasné: a) že jsem nad tím přemýšlela, b) že chci zpřesnit měření a c) že chci předejít poškození vzorků – kdybych to neovysvětlila, mohl by si někdo myslet, že je mi to buď a v zahradnictví měli akorát akci 8+1 sazenice zdarma.

Nečekejte, že čtenář něco pochopí z náznaku – nepochopí.

Detailní popis metody umožňuje dalším osobám provést obdobný experiment a ověřit, jestli jsem si výsledky nevyucala z prstu. **Opakovatelnost** je jedna ze zásad, která by se měla dodržovat při sdílení výsledků výzkumů. Dodá práci na věrohodnosti.

Kdybych např. jednu skupinu rajčat dala do sklepa a zatáhla to, je jasné, že by měla horší výsledky... což je ve výzkumu chápáno jako manipulace experimentu – výsledky jsou pak nepravdivé a tudíž k ničemu. Navíc je kvůli mně mohl někdo přijít o hodně rajčat!

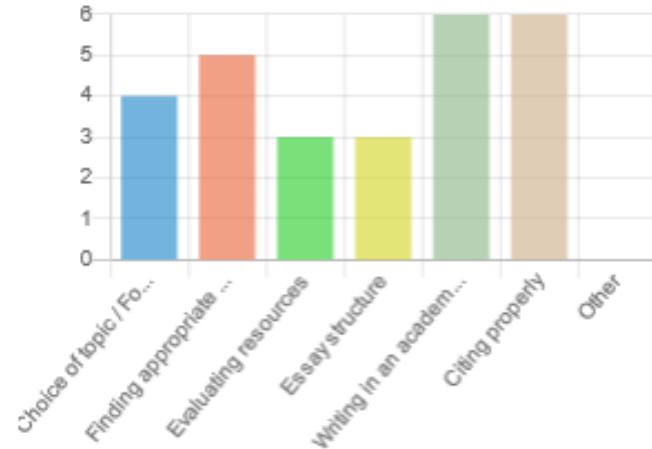
Student Essays – Biggest Challenges



Results from the survey

- All areas of essay writing seem to be problematic for students
- Citing, academic writing and finding appropriate resources stand out
- [NTK research guide on academic writing](#)
- Get inspired by [IB Extended Essays](#)

Which aspects of writing essays are most problematic for students? Feel free to specify.

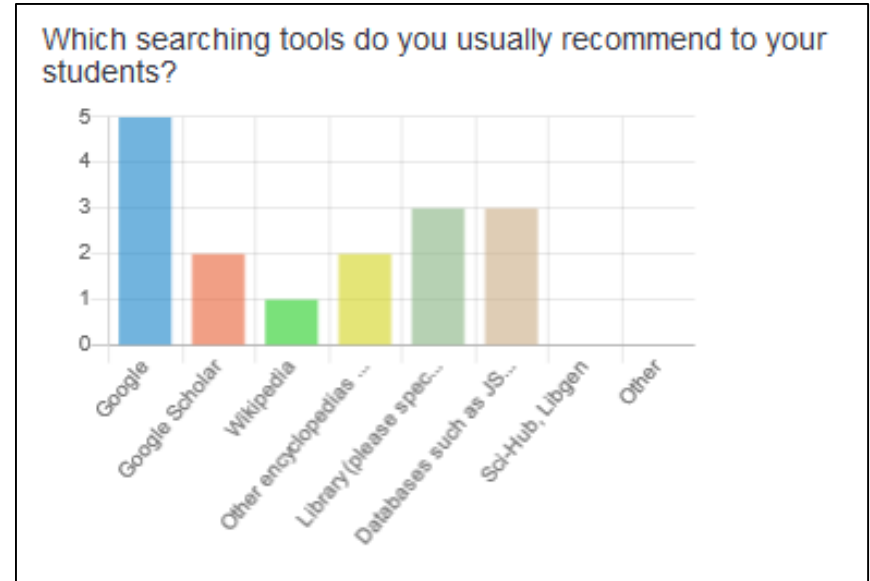


Searching



Which searching tools do you recommend to your students?

How do you keep yourself updated?



Where to Search

- [Google](#) – statistics, reports of institutions, organizations, companies; images
- [Google Scholar](#) ([NTK manual](#)) – scholarly resources: journals; dissertations; preprints; conference proceedings; patents
- [Google Books](#) – usually previews only but sometimes whole chapters
- [Wikipedia](#) (references to sources), [Britannica](#) (limited free version)
- [Theses repositories](#) (references, easy to understand, evaluation)
- Scholarly literature databases: commercial (e.g. [EBSCO](#), [JSTOR](#)) or freely available ([DOAJ](#), [DOAB](#))

[Google vs. Google Scholar vs. Library databases](#)



Where to Search

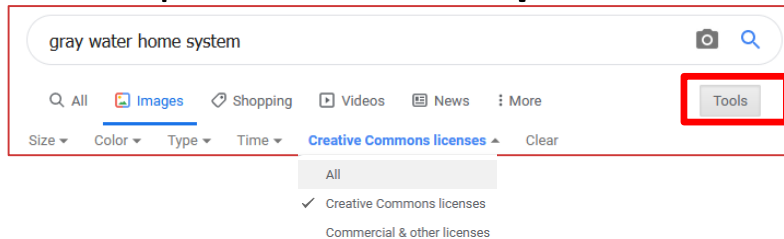
- [NTK Discovery Tool](#) – print and electronic scholarly resources
- [Knihovny.cz](#) search engine – Czech libraries collections
- [Interlibrary loans](#)
- High-school-friendly databases (e.g. [EBSCO](#), [JSTOR](#), [Britannica Academic](#), [Bookport](#), [Access Science](#), etc.) and journals ([Nature](#), [Science](#), [National Geographic](#) etc.) available [via NTK](#)
- [Library subject guides](#) as a resource map
- [Sci-Hub](#), [LibGen](#) – P2P servers

[Google vs. Google Scholar vs. Library databases](#)

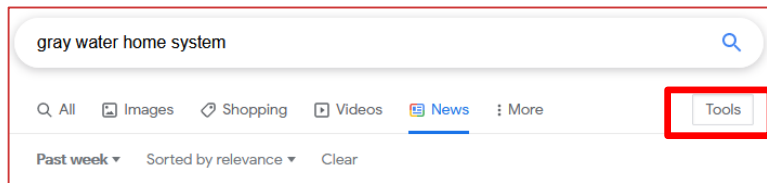


Google Tips & Tricks

- **Look up the author** you are citing (find out about credibility, publication history, etc.)
- Find pictures under **open license**



- Find the **latest information**



site:mit.edu dissertation

(all pages with keyword "dissertation" on domain mit.edu)

filetype:pdf robot

(all PDF files with keyword "robot")



[More Tips & Tricks on Google](#)



Google Scholar

Articles About 94,000 results (0.06 sec)

Any time

- Since 2021
- Since 2020
- Since 2017
- Custom range...

Sort by relevance

Sort by date

Any type

- include patents
- include citations

Review articles

Create alert

Fischer-Tropsch Synthesis
RB Anderson - 1984 - osti.gov
Chapters cover: history and present status of Fischer-Tropsch synthesis; thermodynamics of the process; carbides, nitrides and carbonitrides of iron as catalysts in the Fischer-Tropsch ...
☆ Cite Cited by 1327 Related articles

[\[HTML\] Short history and present trends of Fischer-Tropsch synthesis](#)
H Schulz - Applied Catalysis A: General, 1999 - Elsevier
Due to the large volume of existing literature on Fischer-Tropsch (FT) synthesis, the diversity of the subject and the actually reoriented interest, it seemed indicated to write a historical ...
☆ Cite Cited by 1692 Related articles All 5 versions Web of Science: 967

A comprehensive mechanism for the Fischer-Tropsch synthesis
CK Rofer-DePoorter - Chemical Reviews, 1981 - ACS Publications
Hydrocarbons and oxygenated compounds can be produced catalytically from synthesis gas (CO+ H2) at atmospheric pressure or above and at a few hundred degrees Celsius. The ...
☆ Cite Cited by 709 Related articles All 4 versions Web of Science: 526

Kinetics and selectivity of the Fischer-Tropsch synthesis: a literature review
GP Van Der Laan, A Beenackers - Catalysis Reviews, 1999 - Taylor & Francis
A critical review of the kinetics and selectivity of the Fischer-Tropsch synthesis (FTS) is given. The focus is on reaction mechanisms and kinetics of the water-gas shift and Fischer ...
☆ Cite Cited by 1296 Related articles All 8 versions Web of Science: 887

[\[PDF\] tandfonline.com](#)
Full View

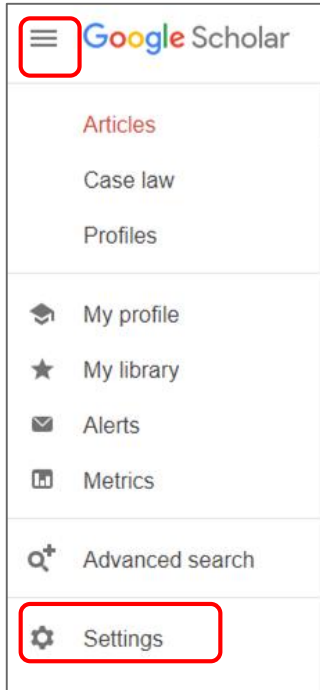
Get full-text (if available)

Full-text via the library subscription (library links)

Get citation

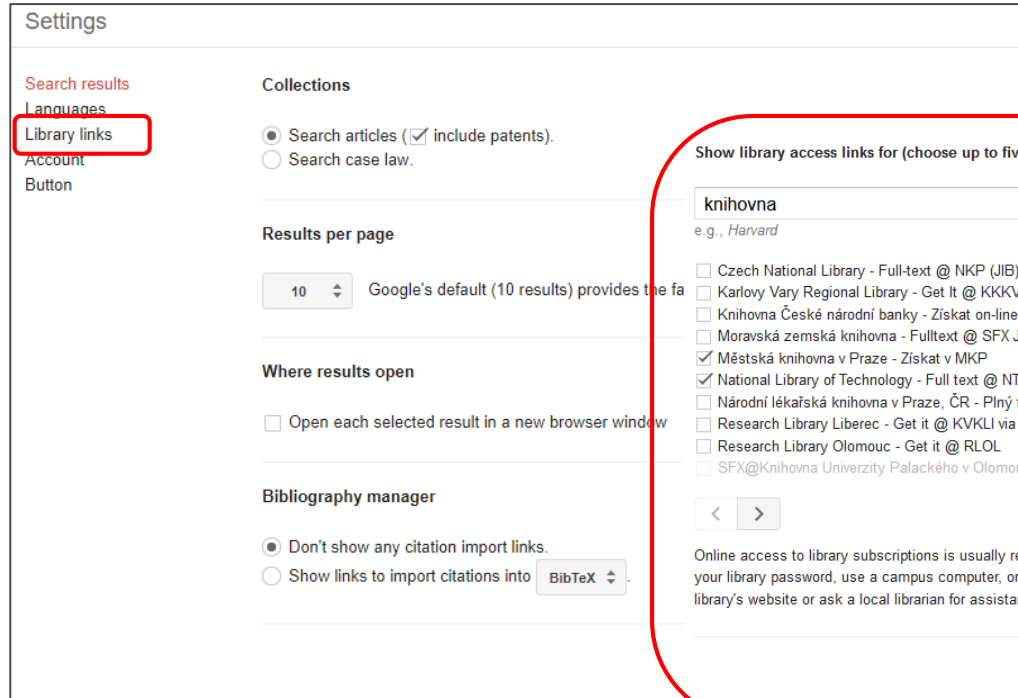


Library Links Setting



Google Scholar

- Articles
- Case law
- Profiles
- My profile
- My library
- Alerts
- Metrics
- Advanced search
- Settings



Settings

Search results

Languages

Library links

Account

Button

Collections

Search articles (include patents).

Search case law.

Results per page

10 Google's default (10 results) provides the fa

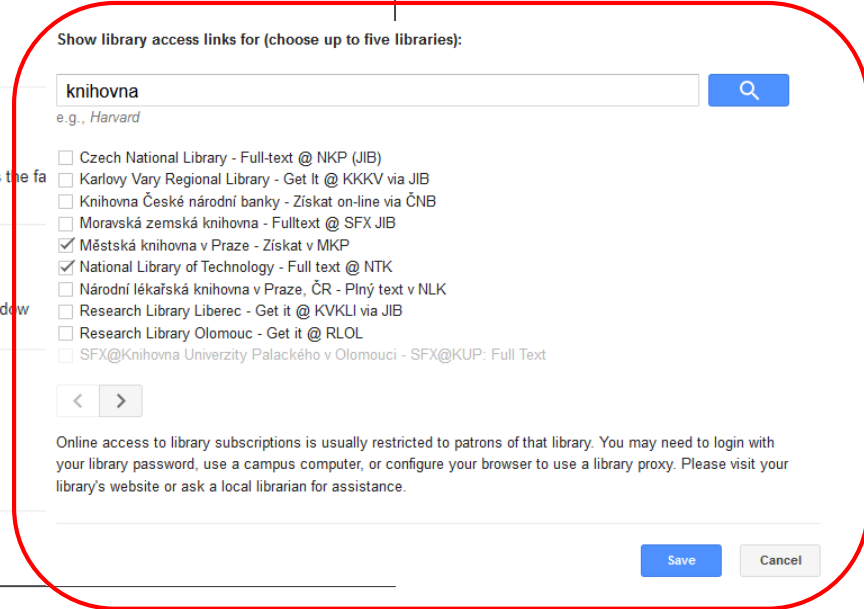
Where results open

Open each selected result in a new browser window

Bibliography manager

Don't show any citation import links.

Show links to import citations into BibTeX



Show library access links for (choose up to five libraries):

knihovna

e.g., Harvard

- Czech National Library - Full-text @ NKP (JIB)
- Karlovy Vary Regional Library - Get It @ KKKV via JIB
- Knihovna České národní banky - Získat on-line via ČNB
- Moravská zemská knihovna - Fulltext @ SFX JIB
- Městská knihovna v Praze - Získat v MKP
- National Library of Technology - Full text @ NTK
- Národní lékařská knihovna v Praze, ČR - Plný text v NLK
- Research Library Liberec - Get it @ KVCLI via JIB
- Research Library Olomouc - Get it @ RL0L
- SFX@Knihovna Univerzity Palackého v Olomouci - SFX@KUP: Full Text

Online access to library subscriptions is usually restricted to patrons of that library. You may need to login with your library password, use a campus computer, or configure your browser to use a library proxy. Please visit your library's website or ask a local librarian for assistance.

Save Cancel



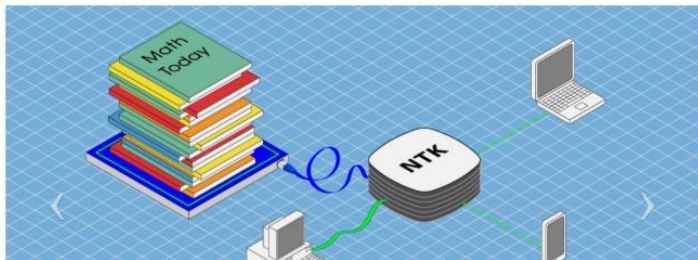
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- Education & Research Support
- Subject Guides
- Tutorials
- Become a Patron
- How to... (tech guides)
- Places to Study
- Suggest a Purchase
- Interlibrary Loan Services
- Conference Services & Rentals
- High Schools Support

Selected eResources

- Cambridge Journals
- EBSCOhost
- Emerald Premier
- Encyclopedia Britannica
- IEEE Xplore
- IOpscience
- Nature Complete
- Oxford English Dictionary
- Oxford Journals
- ProQuest Central
- ProQuest Ebook Central
- ScienceDirect
- Scopus

News

Digital Library Revamp

7.3. 72 – [Kramerius NTK](#) has a new interface. Here you can find lecture notes, historical technical publications and publications made available by EOD project.

New Computers and Open Source

9. 7. – We have installed 150 new computers running Fedora distribution of Linux, in accordance with our vision of the widest possible use of open source solutions in the library.

Log in for off-campus access to full text

Discovery = search all databases from one field

List of all databases (eResources), eJournals & eBooks

Quick access to main databases

Interlibrary Loan Services

Wikipedia.org

- Fact checking
- Keywords
- Terminology translation
- English version reliable, easy to understand and detailed
- Not a reference source as such but provides links to original references
- Internal content assessment

Wikipedia: The Most Reliable Source on the Internet?

Wikipedia is a trustworthy source



The screenshot shows the Wikipedia article for "Artificial intelligence". The article text is as follows:

"AI" redirects here. For other uses, see AI (disambiguation) and Artificial intelligence (disambiguation).

Artificial intelligence (AI), sometimes called **machine intelligence**, is **intelligence** demonstrated by **machines**, in contrast to the **natural intelligence** displayed by humans and other animals. In computer science AI research is defined as the study of "intelligent agents": any device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals.^[1] Colloquially, the term "artificial intelligence" is applied when a machine mimics "cognitive" functions that humans associate with other human minds, such as "learning" and "problem solving".^[2]

The scope of AI is disputed: as machines become increasingly capable, tasks considered as requiring "intelligence" are often removed from the definition, a phenomenon known as the **AI effect**, leading to the quip in *Tesler's Theorem*, "AI is whatever hasn't been done yet."^[3] For instance, **optical character recognition** is frequently excluded from "artificial intelligence", having become a routine technology.^[4] Modern machine capabilities generally classified as AI include successfully understanding human speech,^[5] competing at the highest level in **strategic game systems** (such as **chess** and **Go**),^[6] autonomously operating cars, and intelligent routing in **content delivery networks** and **military simulations**.

Artificial intelligence was founded as an academic discipline in 1956, and in the years since has experienced several waves of optimism,^{[7][8]} followed by disappointment and the loss of funding (known as an "**AI winter**"),^{[9][10]} followed by new approaches, success and renewed funding.^{[8][11]} For most of its history, AI research has been divided into subfields that often fail to communicate with each other.^[12] These sub-fields are based on technical considerations, such as particular goals (e.g. "robotics" or "machine learning"),^[13] the use of particular tools ("logic" or **artificial neural networks**), or deep philosophical differences.^{[14][15][16]} Subfields have also been based on social factors (particular institutions or the work of particular researchers).^[12]

The traditional problems (or goals) of AI research include **reasoning**, **knowledge representation**, **planning**, **learning**, **natural language processing**, **perception** and the ability to move and manipulate objects.^[13] **General intelligence** is among the field's

The right sidebar contains a table of contents for the article:

Artificial intelligence
Major goals
Knowledge reasoning
Planning
Machine learning
Natural language processing
Computer vision
Robotics
Artificial general intelligence
Approaches
Symbolic
Deep learning
Bayesian networks
Evolutionary algorithms
Philosophy
Ethics
Existential risk
Turing test
Chinese room
Friendly AI
History
Timeline
Progress

Artificial intelligence. In: *Wikipedia: the free encyclopedia* [online]. San Francisco (CA): Wikimedia Foundation, 2001– [cit. 2018-11-12]. Available: https://en.wikipedia.org/wiki/Artificial_intelligence



Searching for Images

- [Google images](#) (Usage Rights filter)
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- [Unsplash](#)
- About [CC licenses](#)

Results for coypu



Besançon France Cute Images & Pictures



Berlin Deutschland Eating



How to Make Your Search More Efficient

- Keywords
- Operators
- Phrase searching in ""
- Truncation */?
- Filters
- Advanced search

Their use varies according the search engine



Citing

Texas A&M University Writing Center: [Direct Quoting](#), [Paraphrasing](#), [Summarizing](#)

Do you have a particular **method/system** and **style** you require from your students?

- Author-date or footnotes?
- MLA, APA, Harvard, Chicago ... ?

Make sure students have clear instructions and a manual of style available

Try making citations less boring – [Cite Relay activity](#)



Citation styles

- APA – handbook, brief guide
- Chicago
- ČSN ISO 690
- IEEE
- MLA – handbook, quick guide
- Harvard – not really codified, several variations

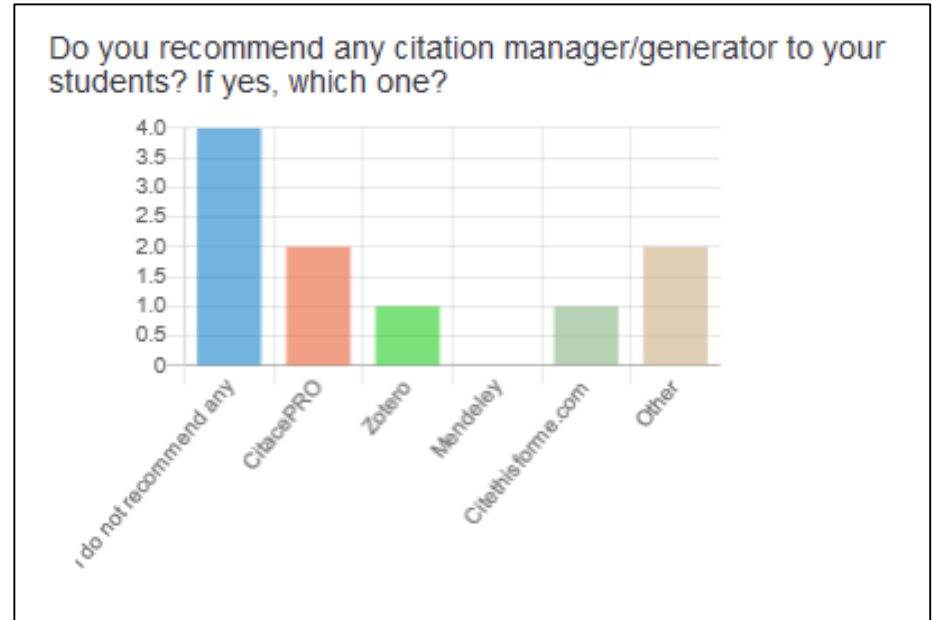
NTK citation manual

Most search engines provide generation of reference items



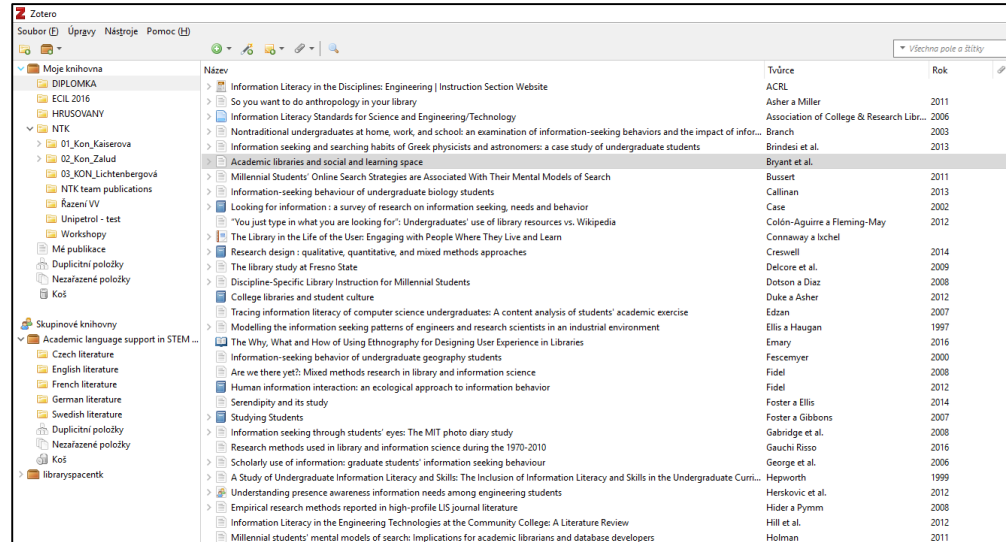
Citation Management Tools

- Citation **generators**
(citethisforme.com, citace.com)
vs. citation **management tools**
([CitacePro](#), [Zotero](#), [Mendeley](#)...)
- Citation **management tools**
helpful not only for generating
citations and reference lists but
also to **organize your research**
and keep it systematic



Citation Management Tools

- Download and manage citations
- Create your personal library
- Generation of reference list
- Tags and notes
- Collaboration



Use them, but don't trust them absolutely!

Zotero (NTK tutorial in Czech)


CitacePRO (NTK tutorial in Czech)

Log in as a guest



Citing – Plagiarism Detection

- Antiplagiarism software ([Odevzdej.cz](https://www.odevzdej.cz), [Turnitin](https://www.turnitin.com), [iThenticate...](https://www.iThenticate.com)) – [comparison](#)
- Google the suspicious text in "", check image history



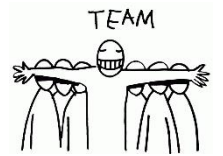
The screenshot shows the Odevzdej.cz website interface. At the top, there is a blue header with the logo (a stylized document icon) and the text "Odevzdej.cz" and "Seminární a školní práce". Below the header, the main content area has a title "Zkontrolovat práci na podobnosti" in orange. Underneath, there is a section for file selection: "Soubor z PC:" followed by a "Procházet..." button and the text "Soubory nevybrány.". Below this is a dashed rectangular box containing the text "nebo soubor přetáhněte sem". Underneath the box is an "Email:" label and a text input field. At the bottom of the form area, there is a green line of text: "Po kontrole bude výsledek odeslán na zadany e-mail a po 5 dnech z databáze vymazán." and a blue "Check" button.



Discussion

Opening questions:

- Student essays at your school – subjects, requirements
- What is your role?
 - Do you take part in the choice of topic?
 - Number and form of consultations and their content
- Best practices of resource evaluation
- Best practices of academic writing
 - How to keep writing to a specific word count?



NTK

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[Schedule consultation](#)

