Ace Your Project Work: Essential Information Literacy Skills

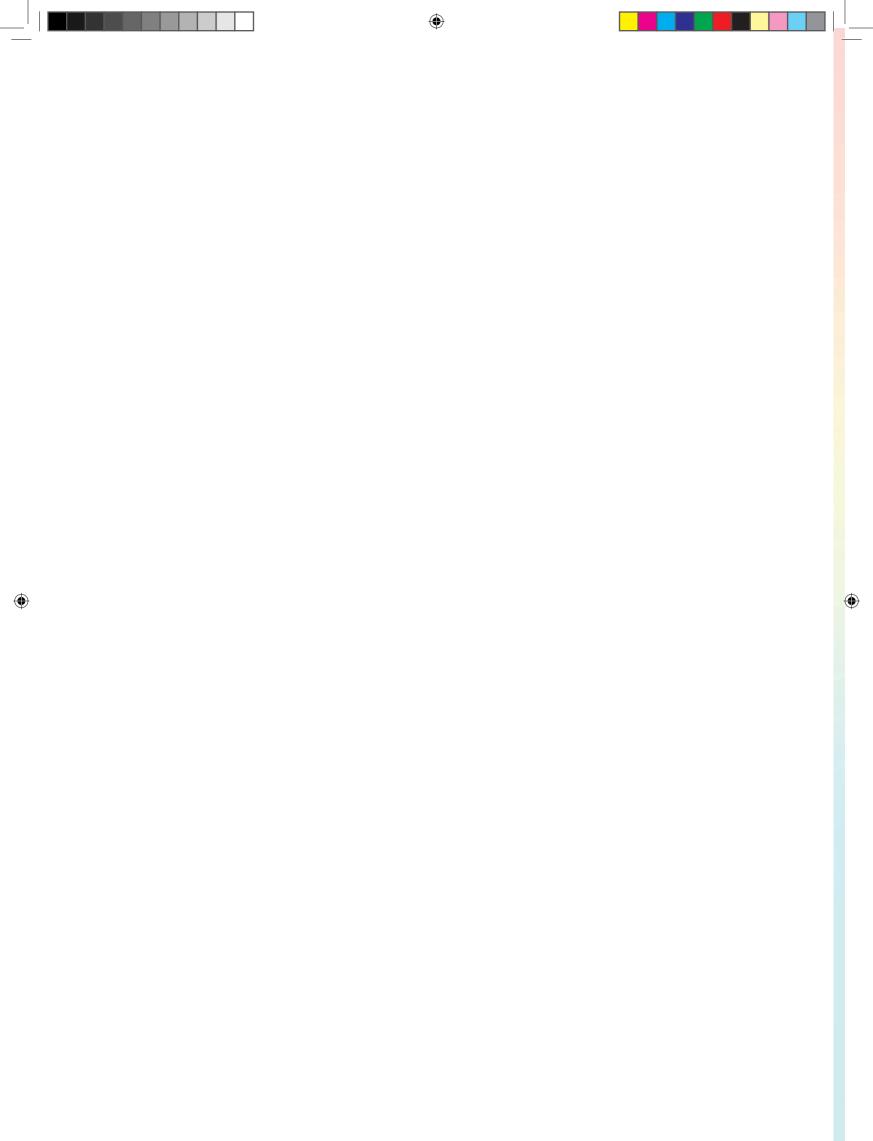
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s.u.r.e.

Understand . Research . Evaluate



What is **S.U.R.E**?

The National Library Board's Source, Understand, Research, Evaluate (S.U.R.E.) programme aims to empower Singaporeans with the necessary information literacy (IL) skills for the digital age. The world has become increasingly digital and information comes in from many sources. Students now need to discern reliable sources much more than before and think critically about what they read. According to the American Library Association, Information Literacy (IL) is "a set of abilities requiring individuals to recognise when information is needed and have the ability to locate, evaluate and use effectively the needed information." IL competencies therefore are important as these help students to hone their critical thinking skills which can be used not just in school but also in life.

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To this end, we have curated resources in this guide on how to instill IL competencies into primary school students and help them become better researchers. There are also suggested lesson plans and additional resources under the S.U.R.E approach in which teachers can use or adapt to their classroom needs. As far as possible, they are also aligned with the Digital Media and Information Literacy Framework. (https://www.mci.gov.sg/literacy/library/individual)



S.U.R.E. distills key Information Literacy (IL) concepts into 4 simple ways:

Source:

Look at its origins. Is it trustworthy?

Understand:

Know what you're reading. Search for clarity.

Research: Dig deeper. Go beyond the initial source.

Evaluate: Find the balance. Exercise fair judgement.

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S.U.R.E - Source

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03

Lesson Plan 1 NLB eResources

Objective:

Students will be able to use eresources from NLB's collection.

Target Audience:

Primary 1-3 students

Materials Required:

- Worksheet A
- Computer Lab

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Duration: 1 hour

Lesson

Pre lesson activity (5 mins)

Main Activity (20 mins)

Wrap Up (5 mins) Teacher to ask students what are some sources that they use when they do research.

Teacher to explain that credible sources are those that can be trusted when they are doing project work. To check on the credibility of sources, refer to the AACCO criteria located in Lesson Plan 8.

Teacher to ask students what kind of library resources they can use for research. Teacher to distribute Worksheet A to students and do first part of the worksheet together.

Teacher to introduce the concept of fiction and non-fiction books to students. Teacher to explain that fiction books are generally not used in research. Then, teacher will demonstrate 2 of the questions in the following part of the worksheet. Students will then fill up the rest of the worksheet in pairs.

Teacher to choose 1 or 2 pairs to present on their answers.

Worksheet A

Library Resources

A library is a house of knowledge. Depending on the size, a library can hold up to hundreds or millions of copies of books, magazines and other forms of resources in physical formats.

In addition, there are online resources that can be accessed through computers. For example, NLB's eResources (eresources.nlb.gov.sg) has a wealth of information that can be used for your research.

Online Resources

NewspaperSG

Newspaper articles inform you about what is happening around you. Some columns are written for leisure, such as movie reviews and comic strips. You can also use some of the articles on relevant topics for your Project Work.

TRY THIS OUT!

Go to NewspaperSg at this URL: https://eresources.nlb.gov.sg/newspapers/ Type in 'Chinese coolies'.

Question: How many results are there?

Archives Online

Archives Online allows users to search for information from the National Archives of Singapore and view selected photographs, maps and plans, listen to oral history interview samples and watch snippets of audio-visual recordings.

TRY THIS OUT!

Go to Archives Online at this URL: nas.gov.sg/archivesonline Type in 'Chinese coolies'.

Question: How many photographs are there?

Singapore Infopedia

Singapore Infopedia is an electronic encyclopedia on Singapore history, culture and people. The articles presented are written by researchers and librarians. If you need to find more information on your research topic, be sure to refer to the list of references which are listed at the bottom of the webpage.

TRY THIS OUT!

Choose a search engine. Type the following in the search box: Chinese coolies AND Infopedia

Scroll down the webpage and find the following: a) Article title:

b) Author's name:

c) Number of newspaper articles cited:

d) Number of books cited:

e) Number of references for websites:

Additional Resources:

http://www.nlb.gov.sg/sure/archives-online/ http://www.nlb.gov.sg/sure/newspapersg/ http://www.nlb.gov.sg/sure/singapore-infopedia/



S.U.R.E - Source

Lesson Plan 2 **Types of Sources** – Primary and Secondary Sources

Objective:

By the end of the session, students will be able to choose their research sources effectively for their needs by identifying primary and secondary sources. They will also be able to differentiate between qualitative and quantitative research.

Lesson Duration:

30

minutes

Target Audience:

Primary 4-6 students

Materials Required:

- Computer Lab
- Worksheet B

Pre lesson activity (5 mins)

Teacher to ask what students know about primary and secondary sources. Teacher can ask guiding questions such as asking students what they think is the meaning of 'primary' and 'secondary'.

Teacher to get students to fill up Worksheet B.

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Teacher to explain that primary sources are first hand accounts. Teacher to ask students to come up with examples of first hand accounts e.g. eyewitness accounts, diary entries etc.

Teacher to move on to explain that secondary resources are accounts someone else's experience e.g. non fiction books, biographies.

Teacher to ask students to research on the topic of "Housing in Singapore" and find some primary and secondary sources. After finding them, teacher to ask students what kind of research questions they can come up with to narrow down what they have looked for. For example, students can narrow down the research question to "HDB flats in Singapore in the 1980s".

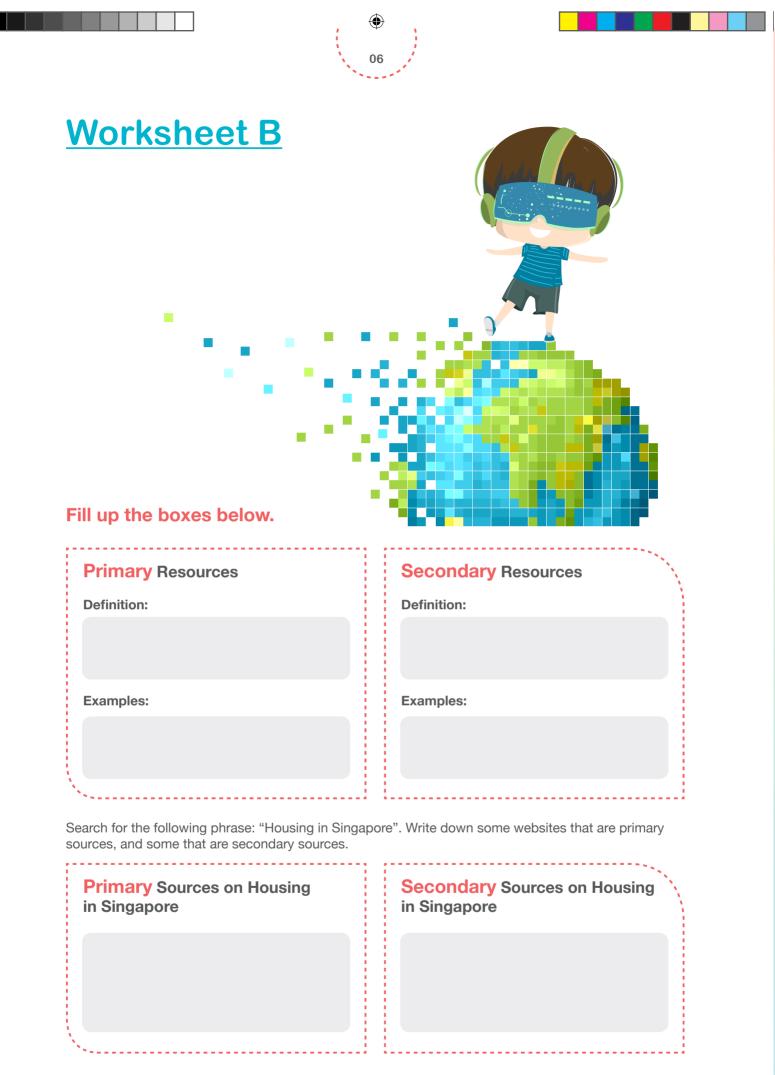
Wrap Up (5 mins)

Main Activity

(20 mins)

Teacher to wrap up by telling students that they need to see what kind of source and research would be best suited for the topic that they are researching on.

Additional Resources: NewspaperSG



After doing the research, now try to narrow down your research question. For example, it can be narrowed down to: HDB flats in 1980s Singapore.

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S.U.R.E - Understand

Lesson Plan 3 Fiction vs. Non-fiction

Objective:

Students will be able to distinguish between fiction and non-fiction books.

Target Audience: *Primary 1-3 students*

Materials Required:

• Worksheet C

Lesson Duration: 30 minutes

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Pre lesson activity (5 mins)

Teacher to ask students what kind of books they usually like to borrow from the library and get a few answers from them. Teacher to mention that there are ebooks available as well, and not just physical books from the library.

Main Activity (20 mins)

Teacher to guide students on the difference between fiction and non-fiction books at the library. Teacher to state that fiction books are stories made up by the author, while non-fiction books are based on facts.

Teacher to distribute worksheet to students and model 1 question for them. Students to complete the other questions individually.

Wrap Up (5 mins)

Teacher to select students to present their answers.

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Worksheet C

Both the physical and ebooks in the library can be categorised into **fiction** and **non-fiction**.

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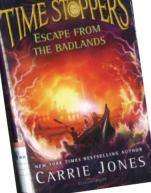
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Fiction Books

These are books that are made up by the writer. These are not true and are imaginary stories. For example, the Harry Potter series is a set of fiction books.

This is an example of a fiction book:

Book Title: Time Stoppers: Escape from the Badlands Author: Carrie Jones Call No.: J JON Publisher: Bloomsbury Children's Books, USA, 2018.



Non-Fiction Books

These are books that are not made up by the writer. They usually contain facts and figures. For example, encyclopaedias and school textbooks are part of non-fiction books.

In the library, the call numbers for fiction books are in letters, while those for nonfiction books are in numbers.

This is an example of a non-fiction book:



Book Title: Space Discoveries (Smithsonian) Call No.: J 520 ORR Author: Tamra B. Orr Publisher Info: Capstone Press, Minnesota, 2019.

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Now look at the following books and circle if it is a fiction/non-fiction book.



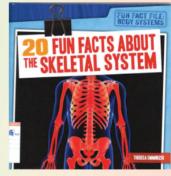
Book Title: Attack of the Alien Dung! (Pet Defenders) Call No.: Gareth P. Jones Author: JS JON Publisher Info: Stripes Publishing, an imprint of the little tiger group, UK, 2017.

Fiction / Non-fiction



Book Title: Ten Minutes to Bed Little Monster Call No.: JP FIE Author: Rhiannon Fielding Publisher Info: Ladybird Books, Penguin Random House, UK, 2018

Fiction / Non-fiction



Book Title: 20 Fun Facts about the Skeletal System Call No.: J 611 Author: Theresa Emminizer Publisher Info: Gareth Stevens Publishing, New York, 2019

Fiction / Non-fiction

Now, look at the books below. From the call numbers of the books, write down if they are fiction or non-fiction.

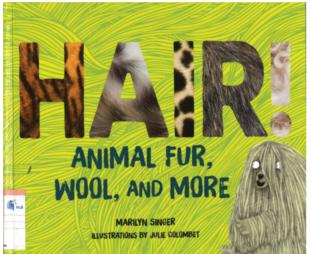
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Book Title: Captain Firebeard's School for Pirates Call No.: J STR Author: Chae Strathie Publisher Info: Scholastic Children's Books, UK, 2016

Answer:



Book Title: Hairl: Animal Fur, Wool and More Call No.: J 591.47 Author: Marilyn Singer Publisher Info: Lerner Publishing Group, Inc., Minneapolis, 2019



Additional Resources:

NewspaperSG (eresources.nlb.gov.sg/newspapers) Singapore Infopedia (eresources.nlb.gvo.sg/infopedia/index.htm) Archives Online (nas.gov.sg/archivesonline/) SURE - Fact vs Opinion (www.nlb.gov.sg/sure/facts-vs-opinions)

EXTENSION ACTIVITY

Discussion Question:

Other than books, what other kinds of resources are there that you can use?



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S.U.R.E - Understand

Lesson Plan 4 Determining the Purpose of Sources

Objective:

By the end of the session, students will be able to differentiate between the different kinds of information they can find. They will be able to identify the purpose of the information and whether or not it is suitable for their research purposes.

Target Audience:

Primary 4-6 students

Materials Required:

Worksheet D



Teacher to ask students what kind of information they have searched for online and offline before. **Pre lesson activity** (5 mins) Teacher to explain that there are different kinds of information online and offline their purpose is different. Purposes: To trick • To persuade • To sell something • To explain/inform • To entertain Teacher to ask which kinds of information would be more suitable for **Main Activity** research purposes. Teacher can choose an advertisement page suitable for (20 mins)the students' needs from a newspaper or magazine. Teacher to distribute Worksheet E to students and fill it in together, explaining the different kinds of purposes that the information may have while filling in together. Wrap Up Teacher to recap on the websites that are suitable for research purposes. (5 mins)

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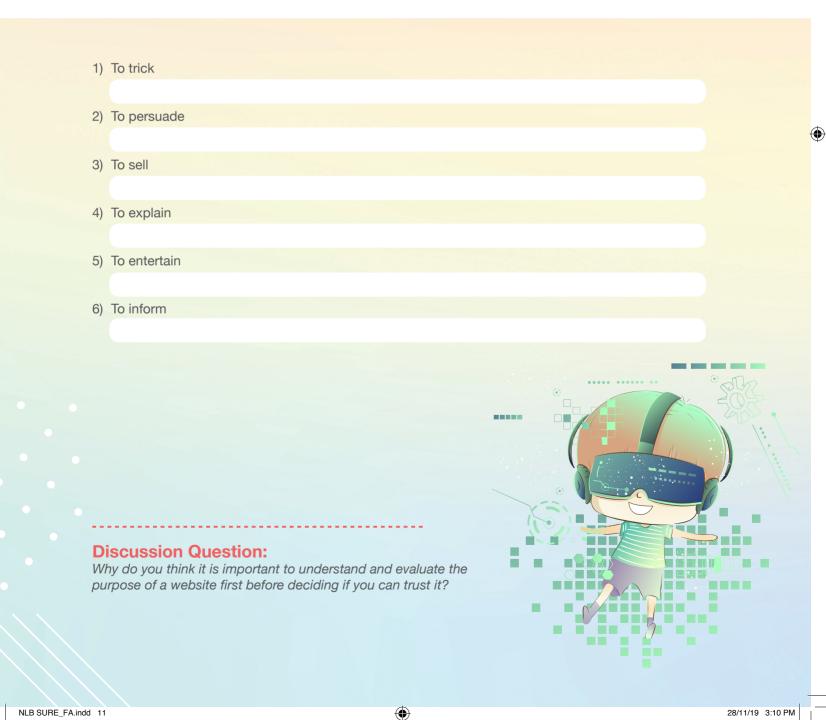
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Worksheet D

Websites can have different purposes. These are listed below:

Look at the page that your teacher has handed to you. What do you think is its purpose? Tick your answers in the boxes beside. There can be more than one answer.



S.U.R.E - Research

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Lesson Plan 5 Searching Skills

Target Audience: *Primary 4-6 students*

Materials Required:

- Computer Lab
- Worksheet E

Lesson Duration: **30** minutes

Pre lesson activity (5 mins)

Teacher to ask students if they use Internet search engines at home or in school.

Teacher to state that Internet search engines help students to look for information more quickly. Students will also be able to get more sources by using search engines compared to from print sources. However, many of these sources may not be relevant because of keyword use and students may end up wasting time trying to sieve through them. Therefore techniques on how to search more effectively on the Internet will be taught.

Main Activity (20 mins)

Teacher to distribute worksheet E to students and get them to fill it up individually.

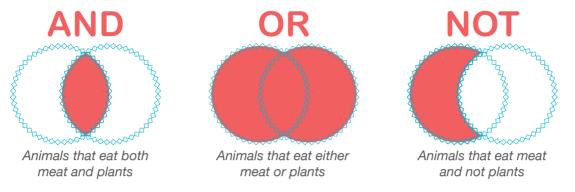
Teacher to choose a few students to present their answers for each of the boxes.

Wrap Up (5 mins) Teacher to reiterate that using effective Internet searching strategies would help students to get more relevant information within a shorter period.



Boolean Operators

For example, this Venn diagram can be used for animals that eat meat and plants.



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The results found using the 'OR' Boolean operator would be more than if the 'AND' or 'NOT' operators are used.

Try out the following questions using a search engine and write down the number of search results. What do you notice about them?

	Type of Search	When I key in	Number of search results
1	Single Keyword	Capteh	
2	Exact/Specific	Capteh AND Singapore	
3	Exclude	Capteh NOT Singapore	
4	OR	Capteh OR Singapore	

Quotation Marks

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This searches for the exact/specific phrase, like the AND Boolean command. Now, key in "Singapore Merlion". How many search results do you get?

Additional Resources:

http://www.nlb.gov.sg/sure/smart-searching-saves-precious-time/ http://www.nlb.gov.sg/sure/capteh/

EXTENSION ACTIVITY

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Digital Footprints

Teacher can discuss with students on digital footprints, which is the trail of data about a user that constitutes their online activity. By searching for certain keywords, more results on similar topics may pop up in the future. Using such data left behind by the user, advertisers can track the user's data and online activities to generate consumer profiles and target advertisements at users.

Discussion Questions:

- 1) By searching for keywords on the internet or social media, advertisers can track what the user is interested in and show them similar advertisements. How do you feel knowing that advertisers can do this?
- 2) What can you do to manage digital footprints? How can you create a positive digital footprint?



S.U.R.E - Research

Lesson Plan 6 Citations

Objective:

By the end of the session, students will be able to acknowledge authors and be able to cite books and websites.

Target Audience:

Primary 4-6 students

Materials Required:

- Computer lab
- Worksheet F

Lesson Duration: **30 minutes**

Pre lesson activity (5 mins)

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Teacher to ask students how they would feel if someone stole their belongings or copied their answers.

Teacher to explain that copying the work of others is equivalent to stealing, and that during research, students need to ensure that they acknowledge the writer if they have used his or her work.

Main Activity (20 mins)

Wrap Up (5 mins) Teacher to distribute Worksheet F to students and model a few questions. After that, students will fill up the worksheet on their own.

Teacher to pick a few students to answer questions after that.

Teacher to reiterate that any sources used by students must be cited, otherwise it would be considered as plagiarism.

Additional Resources:

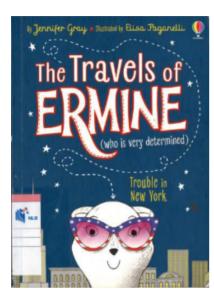
http://www.nlb.gov.sg/sure/citations/ http://www.nlb.gov.sg/sure/cross-referencing-citation



Worksheet F

Books

Follow these steps below to cite a book in American Psychological Association (APA) format.



Author: Jennifer Gray Year of Publication: 2018 Title of Work: The Travels of Ermine: Trouble in New York Publisher City, State: London Publisher: Usborne

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Citation: Gray, Jennifer. (2018). The Travels of Ermine: Trouble in New York. London, Usborne. There are a few ways to cite sources. One of the formats in which to do so is the American Psychological Association (APA) way. This is commonly used to give credit to the sources that people have referred from.

After you have gathered your search results, it is good to keep them in a list or bibliography. You may need to refer to them again in the future.

Websites

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Authors: Bonny Tan Title: Capteh Date website was published (if applicable): (n.d.) URL: http://eresources.nlb.gov.sg/infopedia/articles/ SIP_1732_2010-11-26.html?s=capteh

Citation: Tan, Bonny. (n.d.). Capteh. Retrieved from http://eresources.nlb.gov.sg/infopedia/articles/ SIP_1732_2010-11-26.html?s=capteh

Try out the following questions below.

1) Author Title Date of Visit to the Website URL or Place Citation: J.K. Rowling The Hogwarts Express 15 March 2019 pottermore.com/writing-by-jk-rowling/the-hogwarts-express



Title: The Mysterious Makers of Shaker Street: Sounds Like Trouble Author: Stacia Deutsch Year: 2018 Publisher City, State: Mankato, United States Publisher: Capstone Press Citation:



Title: Riddle Gully Secrets Author: Jen Banyard Year: 2016 Publisher City, State: North Fremantle, WA, Australia Publisher: Fremantle Press Citation:

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S.U.R.E - Evaluate

Lesson Plan 7 Evaluating Online Sources

Objective:

By the end of the session, students will be able to understand and evaluate online sources using AACCO (Authority, Accuracy, Currency Coverage, Objectivity)

Target Audience:

Primary 4-6 students

Materials Required:

- Computer Lab
- Worksheet G
- Pre-prepared newspaper article or website printout

Lesson Duration: **1 hour**

Pre lesson activity (5 mins)

Teacher to ask students how they would determine if a piece of information can be trusted, e.g. if it comes from their friends does it automatically mean that it's accurate?

Teacher to discuss with students.

Main Activity (20 mins)

Teacher to introduce the concept of AACCO using Worksheet G to students and state that these are some criteria they can use to evaluate if a resource is trustworthy and can be used in their research work.

Teacher to distribute the pre-prepared newspaper article/website printout for students to evaluate in pairs using AACCO.

Wrap Up (5 mins)

Teacher to reiterate that AACCO is a method that can be used to evaluate if a website is reliable.



Worksheet G

After reading the article given to you, fill in the checklist below.

		Tick if your answer is 'Yes'
Authority Who wrote the information?	 Is the author clearly stated? Is the author qualified to write about the topic? Is there an email address or website provided about the author? 	
Accuracy Is the information accurate and relevant?	 Can the information be found in at least 2 other sources that are credible, such as non fiction books from the library or bookstore? Is the page free of spelling errors? 	
Currency Is the information up to date?	1) Is there an indication when the information was last updated?	
Coverage Is the information complete?	 Is the material in depth? Does it cover a wide range of information on the same topic? 	
Objectivity Is the information biased?	 Does the information present more than 1 side of the story? For example, would you believe a book that only mentions the advantages of owning a pet, or would you believe a book that mentions both the advantages and disadvantages? 	

Have you ticked at least 1 option from each category? If so, it is likely that the source is credible.

EXTENSION ACTIVITY

Teacher can discuss with students further ways to determine the credibility of online sources. Would a result retrieved from a search engine automatically be credible?

Discussion Question:

Why do you think it is important to check the credibility of the online information that you have received?

Additional Resources:

http://www.nlb.gov.sg/sure/video-case-of-the-antique-chairs/

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Outreach Programmes

For booking and inquiries, please email sure@nlb.gov.sg

Combating Fake News Workshops

Teachers' Workshop

Our workshop will introduce educators to our courseware on combating fake news. Through the session, concepts such as recognizing the types of online falsehoods, identifying tell-tale signs of fake articles and utilizing the latest fact-checking platforms will be taught. In this way, the teachers can then pass down the knowledge to their students by customizing our courseware to their respective schools' student learning profiles.

Audience: Teachers Duration: 1.5 – 2.0 hours Venue: School venue or National Library Building Audience size: Minimum 20 pax

Students' Workshop

Held in the conducive learning space of the National Library, our students' workshop will introduce the essentials of combating fake news and contributing towards the Digital Defence of Singapore. This workshop is suitable for students from primary to secondary levels, including cyber wellness ambassadors.

Audience: Students

Duration: 1 to 1.5 hours Venue: The National Library, Level 10 Learning Space Audience size: Minimum 20 pax, maximum 80



eResources Workshops

Teachers' Workshop

This workshop will introduce teachers to the digital resources such as academic databases and websites that the National Library Board has which can be used in student education. Basic skills on how to search for information more effectively will also be taught.

Audience: Teachers

Duration: 1.5 – 2.0 hours Venue: School venue or National Library Building Audience size: Minimum 20 pax



Students' Workshop

Students will be introduced to the websites that the National Library Board has which are useful for their research work. They will also be taught skills on how to search for information on internet search engines more effectively.

This workshop is suitable for students from primary to secondary levels, including cyber wellness ambassadors.

Audience: Students Duration: 1 to 1.5 hours Venue: The National Library, Level 10 Learning Space Audience size: Minimum 20 pax, maximum 80

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NLB eResources

NLB eResources

This section features different electronic resources (eResources) available from the National Library Board at eresources.nlb.gov.sg. An NLB myLibrary ID is required for eResources that state "Login Required".

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PressReader (Login Required)

PressReader features a collection of over 7,000 newspaper and magazine titles in 60 languages from 100 countries. It is an excellent source for current affairs and global news, and is useful for case studies.

ProQuest Central (Login Required)

A database comprising academic journals, trade publications, theses and dissertations, as well as full-text newspaper articles, ProQuest Central (eresources.nlb.gov.sg) covers over 160 subject areas. It also features a user-friendly interface, with an automatic citation function.

EBSCOHost Academic Search Complete (Login Required)

EBSCOHost Academic Search Complete supports research by providing journals, periodicals, reports, books and more. It covers a broad range of important areas of academic study, including anthropology, engineering, law, sciences and more.

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NLB eResources

The resources here do not require a MyLibrary ID to access.

NewspaperSG

NewspaperSG is an online resource featuring current and historical Singapore and Malaya newspapers. It comprises articles from The Straits Times from 1831 to 1989 (accessible from home) and up to 2014 (via multimedia terminals in NLB libraries).

eresources.nlb.gov.sg/newspapers

Singapore Infopedia

Singapore Infopedia is an electronic encyclopaedia on Singapore's history, culture, people and events. The articles are curated and written by librarians, and include footnotes and citations.

eresources.nlb.gov.sg/infopedia

Hopefully all of this has helped you with your research. Remember to use the S.U.R.E approach whenever you need to look for sources!

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National Library

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