

MODULE 1 - Information literacy

TRAINING COURSE

Bridging the gap between Higher Education and the labor market

Module/session 1 – Information literacy

Duration

90'

Contents

1. Information Literacy overview
2. Searching techniques
3. Sources of Info & Knowledge
4. Evaluating Online Content
5. Ethical Issues Plagiarism
6. Disinformation & fake news

Expected outcomes

By the end of Module 1 - Information literacy (UoM) (1h30) participants are expected to be equipped with practical strategies to enhance their own as well as their students' information literacy (IL) skills (finding, accessing, evaluating, and using information effectively and ethically). More specifically, expected outcomes of the training course include:

- Foster a positive attitude towards acquiring IL skills for personal, educational, and workplace purposes.
- Apply effective searching techniques to specific scenarios and tasks.
- Identify and access popular online sources of information and knowledge.
- Guide students in developing critical thinking skills to approach received information with a discerning and evaluative mindset.
 - o Evaluate on-line content using the CRAAP test.
 - o Discern credible from non-credible online content.
- Provide a clear understanding of what constitutes plagiarism, including its various forms and potential consequences.
- Serve as role models for their students by demonstrating how they incorporate ethical principles and practices when using information in their own projects.
- Encourage students to engage in responsible digital citizenship by fostering an awareness of the impact of disinformation and fake news on society.
- Promote the importance of fact-checking and verifying information from diverse sources before accepting or sharing it.

Training methodology

SESSION PROGRAM

Activities	Time/duration
1. Welcoming and project presentation	9'
2. Information Literacy overview	12'
3. Explore and compare popular online sources for different contexts.	12'
4. Sources of Info & Knowledge. Use of Generative AI in academic settings.	12'
5. Guidelines for evaluating online content	15'
6. Ethical Issues Plagiarism	15'
7. Disinformation, fake news, and the role of social media	15'

STEP BY STEP

What to do	Technical aspects
Tests: connection, resources, keynote.	Before the session
0. Welcoming and project presentation	9'
Welcome all participants. Share the learning objectives of the module. Ask participants to: <ul style="list-style-type: none"> - introduce themselves and their classes - talk about previous experience in enhancing students' IL skills 	<ul style="list-style-type: none"> • “B2B Training Course_M1_Keynote_EN” (slides 1-5)
1. Information Literacy overview	12'
<ul style="list-style-type: none"> - Key terms related to Digital and Information Literacy, - The need for Digital and Information Literacy for young adults, - Adopting a Positive Attitude towards acquiring digital and information literacy skills. - Activity: Provide examples of how digital and information literacy skills can empower individuals and open up new opportunities in personal, academic and professional life. Some examples are provided here. 	<ul style="list-style-type: none"> • “B2B_TrainingCourse_M1_Keynote_EN” (slides 6-24)
2. Searching techniques for academic, workplace, or everyday life contexts.	12'
<ul style="list-style-type: none"> - Effective Searching Techniques, - The importance of refining search queries, - Complex search scenarios, - Activity: Applying Searching Techniques. Examples of search scenarios are provided here. 	<ul style="list-style-type: none"> • “B2B_TrainingCourse_M1_Keynote_EN” (slides 25-43)
3. Sources of Info & Knowledge. Use of Generative AI in academic settings.	12'

<ul style="list-style-type: none"> - Popular sources of information for academic, research, workplace, and everyday life contexts, - Advantages and drawbacks of each type <p>Video: Using Generative AI in academic settings (critical approach, ethical use)</p> <p>https://monash.au.panopto.com/Panopto/Pages/Viewer.aspx?id=89ed71d3-972c-4939-b6ce-afd50109d15e&start=155.505504</p> <p>-Activity: Explore and compare various online source types. Examples of sources and their advantages and drawbacks are provided here.</p>	<ul style="list-style-type: none"> • “B2B_TrainingCourse_M1_Keynote_EN” (slides 44-69)
<p>4. Guidelines for evaluating online content</p> <ul style="list-style-type: none"> - Importance of Critical Thinking - The CRAAP Test - Activity: Applying the CRAAP Test. Examples and scenarios are provided here. 	<p>15'</p> <ul style="list-style-type: none"> • “B2B_TrainingCourse_M1_Keynote_EN” (slides 70-82) •
<p>5. Ethical Issues Plagiarism</p> <ul style="list-style-type: none"> - What is considered as Plagiarism? Definition, Types and Consequences of Plagiarism - Strategies to Avoid Plagiarism - Effective citation practices - Activity: Create your citation by using an online tool. The activity is presented here. 	<p>15'</p> <ul style="list-style-type: none"> • “B2B_TrainingCourse_M1_Keynote_EN” (slides 83-102)
<p>6. Disinformation, fake news, and the role of social media</p> <ul style="list-style-type: none"> - Understanding Disinformation - Role of Social Media in Spreading Disinformation - Developing critical attitude against received information - Taking Actions to Prevent Spreading Disinformation - Activity: Reflect on what you have learned about disinformation, fake news, and the role of social media. 	<p>15'</p> <ul style="list-style-type: none"> • “B2B_TrainingCourse_M1_Keynote_EN” (slides 103-118)

SESSION RESOURCES

RESOURCES	<ul style="list-style-type: none"> • Provided in slides, for each subtopic
REFERENCES	<ul style="list-style-type: none"> • Provided in slides, for each subtopic
ASSESSMENT/EVALUATION	<ul style="list-style-type: none"> • Mini quiz for each subtopic is provided in slides

Examples of how digital and information literacy skills can empower individuals and open up new opportunities in personal, academic and professional life

1. Academic life: Be able to conduct effective research, locate relevant and credible sources, and critically evaluate information for their academic assignments and projects. Discern between scholarly and non-scholarly sources, determine the quality of on-line information, distinguish their own ideas from those of others and use proper citation practices to avoid plagiarism.
2. Make well-informed decisions (e.g., about their personal well-being: be able to critically evaluate health-related articles, websites, and social media posts, avoid misinformation or potentially harmful advice)
3. Career exploration: explore various career paths, research industry trends, and gather information about job requirements and qualifications. Use online platforms, professional networking sites, and job search engines to access up-to-date information about career opportunities, job interviews, and employer reviews.
4. Continuous learning and professional development: stay updated with the latest advancements in their field through online courses, webinars, and digital resources, fostering lifelong learning and career growth.

Examples of search scenarios:

1. Visit advanced Google search https://www.google.com/advanced_search and search for a picture of a European capital city in jpg format.
2. Workplace Project: An employee is **looking** for case studies related to successful team collaboration in the software development industry. Search query: *"successful team collaboration" "software development" filetype:pdf intitle:case study*
3. Workplace Project: An employee needs to gather market research data on the growth of e-commerce in the fashion industry in the past decade. Search query: *"e-commerce" "fashion industry" intitle:report after:2012*
4. Academic Research: A student is searching for reputable sources discussing the impact of social media on mental health in adolescents, focusing on studies published in the last three years. Search query: *"social media" "mental health" adolescents site:.edu intitle:study after:2018*
5. Academic Research: A student is researching the impact of climate change on biodiversity and wants to find reports and studies from reputable organizations. Search query: *"climate change" biodiversity intitle:report OR intitle:study site:.org*
6. Everyday Life: Someone wants to find recipes for vegan desserts that do not include gluten or soy. Search query: *vegan dessert recipes -gluten -soy*

Examples of various Online Sources types (strengths and weaknesses included):

1. Academic Journals (www.jstor.org, www.sciencedirect.com):
 - Strengths:
 - Peer-reviewed: Articles undergo rigorous review by experts in the field, ensuring high quality and reliability.
 - Credibility: Often published by reputable academic institutions and associations.

- Depth and specificity: Provide in-depth analysis, research findings, and scholarly discussions on specific topics.
 - Weaknesses:
 - Accessibility: Some journals may require subscriptions or access fees, limiting availability.
 - Time lag: Peer review and publication process may lead to a delay in getting the latest research.
 - Technical language: Content can be complex and difficult to understand for non-experts.
2. Books (e.g., books.google.com, openlibrary.org):
- Strengths:
 - Comprehensive information: Books offer extensive coverage of a topic, providing in-depth knowledge.
 - Author expertise: Books are often written by subject matter experts.
 - Historical context: Books can provide historical perspectives and long-term analysis.
 - Weaknesses:
 - Currency: Books may not always reflect the most up-to-date information.
 - Limited focus: Books might not cover specific, niche topics in as much detail as specialized sources.
 - Availability: Access to books may require purchase, borrowing from libraries, or limited digital copies.
3. Online Databases and Digital Libraries:
- Strengths:
 - Extensive resources: Online databases and digital libraries offer a vast collection of scholarly articles, books, and research materials.
 - Credible and peer-reviewed content: Many online databases contain peer-reviewed materials from reputable sources.
 - Advanced search and filtering options: Online databases provide powerful search features to help users find specific information efficiently.
 - Weaknesses:
 - Access restrictions: Some online databases require subscriptions or access fees, limiting availability to users.
 - Learning curve: Using online databases may require familiarity with advanced search techniques and database-specific interfaces.
 - Outdated or incomplete content: Not all databases update their content regularly, and certain areas of research may be underrepresented.
4. Government Publications (e.g., publications.europa.eu):
- Strengths:
 - Authority and reliability: Government publications are produced by official bodies and are considered reliable sources of information.
 - Regulations and policies: Provide access to laws, regulations, reports, and statistical data.
 - Transparency: Government publications are often accessible to the public, promoting transparency.
 - Weaknesses:
 - Biased information: Government publications may have a specific agenda or bias.
 - Complexity: Legal language and technical terms can make content challenging to understand.

- Accessibility: Some government documents may not be easily accessible or available to the general public.
5. Industry Reports (e.g., www.statista.com):
- Strengths:
 - Market insights: Industry reports provide valuable data, trends, and analysis in specific sectors.
 - Expert analysis: Produced by market research firms or industry experts, providing authoritative perspectives.
 - Timeliness: Reports often include the latest market information and emerging trends.
 - Weaknesses:
 - Cost: Access to industry reports may require subscriptions or purchase fees.
 - Limited scope: Reports may focus on specific industries or regions, lacking a broader perspective.
 - Potential bias: Reports may be commissioned by industry stakeholders, influencing their objectivity.
6. News Outlets (e.g., www.bbc.com/news):
- Strengths:
 - Timeliness: News outlets provide up-to-date information on current events and breaking news.
 - Wide coverage: News sources cover a broad range of topics and provide diverse perspectives.
 - Accessibility: News outlets are easily accessible through various mediums, including online platforms.
 - Weaknesses:
 - Sensationalism and bias: News can be influenced by editorial biases or prioritize attention-grabbing headlines.
 - Accuracy concerns: News articles may contain errors or lack comprehensive analysis due to time constraints.
 - Lack of depth: News reports often provide a condensed overview rather than in-depth analysis.
7. Blogs and Online Opinion Pieces (medium.com, <https://www.quora.com/>):
- Strengths:
 - Diverse perspectives: Blogs offer a platform for personal opinions, experiences, and alternative viewpoints.
 - Timeliness and relevance: Blogs can provide up-to-date commentary on current issues and trends.
 - Accessibility: Blogs are easily accessible and often free to read.
 - Weaknesses:
 - Lack of credibility: Blogs can vary widely in quality, and authors may not have expertise or undergo rigorous review.
 - Bias and subjectivity: Bloggers often express personal opinions, which may lead to a lack of objectivity.
8. Websites and Online Articles
- Strengths:
 - Accessibility: Online articles and websites are readily available and easily accessible.
 - Timeliness: Online sources can provide real-time updates and the latest information.

- Variety of perspectives: Online sources offer a wide range of viewpoints and opinions on various topics.
 - Weaknesses:
 - Credibility concerns: Not all online sources are reliable, and it can be challenging to determine their credibility.
 - Lack of quality control: Online content may not go through a rigorous editorial process, leading to inaccuracies and bias.
 - Information overload: The abundance of online information can make it challenging to filter out relevant and accurate content.
9. Social Media:
- Strengths:
 - Quick dissemination of information: Social media platforms allow for rapid sharing of news, trends, and updates.
 - User-generated content: Social media platforms facilitate the sharing of personal experiences and diverse perspectives.
 - Engagement and interaction: Users can actively participate in discussions and contribute to the information ecosystem.
 - Weaknesses:
 - Misinformation and rumors: Social media can be a breeding ground for fake news, rumors, and unverified information.
 - Limited context and depth: Due to character limitations or superficial content, social media posts may lack comprehensive analysis or context.
 - Echo chambers and confirmation bias: Social media algorithms may reinforce users' existing beliefs and limit exposure to diverse viewpoints.
10. Online Forums and Discussion Boards (e.g., <https://www.quora.com/>):
- Strengths:
 - Community and collaboration: Online forums facilitate discussions and knowledge-sharing among users with similar interests.
 - Practical insights and experiences: Users can provide real-life experiences, advice, and practical solutions to specific problems.
 - Networking opportunities: Online forums allow users to connect with professionals and experts in various fields.
 - Weaknesses:
 - Quality and reliability: Information shared on forums may not be fact-checked or verified, leading to inaccuracies.
 - Anonymity and lack of accountability: Users on forums may not be identifiable, making it difficult to assess the credibility of the information provided.
 - Off-topic discussions and noise: Online forums can be prone to irrelevant or distracting discussions, hindering the search for specific information.
11. Online Video Platforms (e.g., YouTube):
- Strengths:
 - Visual and interactive content: Videos can present information in a visually engaging and interactive manner.
 - Wide range of topics: Online video platforms cover a broad spectrum of subjects, providing educational and informative content.
 - Accessibility: Users can access video content anytime, anywhere, and on various devices.
 - Weaknesses:

- Limited control over content quality: Video platforms may not regulate the accuracy or quality of content uploaded by users.
- Biased or misleading content: Some videos may promote specific agendas or present information without proper verification.
- Lack of depth and context: Videos often provide condensed information, lacking the comprehensive analysis found in other sources.

12. Generative AI (e.g, ChatGPT):

- Strengths:
 - Efficiency: Generative AI can quickly produce large amounts of content, including articles and blog posts.
 - Creativity: AI models can generate unique and innovative content that human writers may not have thought of.
 - Scalability: AI can generate content at a much larger scale compared to manual writing.
- Weaknesses:
 - Lack of human judgment: AI-generated content may lack the critical thinking and contextual understanding that human writers possess.
 - Quality control: AI-generated content may contain errors, inaccuracies, or biases that require human oversight.
 - Ethical concerns: The use of generative AI raises ethical questions about authorship, plagiarism, and transparency in content creation.

Examples and scenarios related to the use of the CRAAP test for evaluating online content, generated with Chat GPT 4.0 assistance:

- Currency:
 1. A news article about a recent scientific breakthrough in renewable energy published last week.
Scenario: Students need to determine if the currency of the information is appropriate for their research or if more recent sources are needed.
 2. A research article on the impact of social media on mental health published in 2019.
Scenario: Students need to determine if the information is current enough to align with the latest research findings in the field of social media and mental health.
- Relevance:
 3. A blog post discussing tips for healthy eating habits in college.
Scenario: Students need to assess if the information is relevant to their specific context as college students, considering factors such as dining options and limited resources.
 4. A website providing information about the history of World War II.
Scenario: Students need to assess if the information is relevant to their research topic, ensuring it aligns with the specific aspects or time period they are studying.
- Authority:
 5. An article on climate change written by a renowned climate scientist and published in a reputable scientific journal.
Scenario: Students need to evaluate the authority and expertise of the author, considering their qualifications and credentials in the field of climate science.
- Accuracy:

6. Example: A social media post making claims about a new health supplement curing cancer without providing scientific evidence.
Scenario: Students need to determine the accuracy of the information by assessing if it is supported by reliable evidence or if it is based on anecdotal or unverified claims.
 - Purpose:
7. A website advocating for a particular political viewpoint and promoting biased information.
Scenario: Students need to analyze the purpose of the content and consider if it is designed to inform objectively or if it has a specific agenda or bias.
8. A product review website that primarily promotes a specific brand while providing biased and favorable reviews.
Scenario: Students need to assess the purpose of the website and determine if it is providing objective information or if it has a commercial bias.

Individual activity: Create your citation by using an online tool

Suppose that we want to create a citation for the following URL:

<https://liquid-state.com/healthcare-needs-digital-health-apps/>

1. Visit <https://www.citethisforme.com/>
2. Click on the “Create citations” button.
3. Choose your source: Website.
4. Insert URL and click Search.
5. Click Cite.
6. Check the result and fill-in additional available details if needed.