Developing techniques for searching and managing digital data, information and content

KEY WORDS
After learners have listened to an audio recording, read a text or watched a video, ask them to identify key words for the following two purposes:
• to use in a web search to find out more about the topic
• to create an appropriate filename for a digital record of the audio, text or video file so that they can easily find it again

Why not invite learners to share their ideas for key words in the chat box and have other class members identify whether the term is most useful for using in a web search or for keeping a digital record.
Making critical judgements about digital data, information and content

**IS IT TRUE?**

When learners encounter information in digital contexts within course materials (e.g. in the form of a website, blog post, or podcast), write the text from the box below on the board:

**IS IT TRUE?**

- Read / listen closely. Do you think this is believable? Why (not)?
- Who do you think wrote this? Why did they write it?
- Look at other websites on the same topic. Do they give the same information?

Allow time for learners to discuss the questions and research other reliable sources to help them decide if the information is likely to be true or not.

Try asking learners to share their ideas and findings in a collaborative document such as Google Docs.
Selecting and using appropriate digital tools for specific purposes

WHICH TOOLS?
Ask learners to give you examples of different digital tools and what they’re used for (e.g. a mobile phone to take and share a digital photo, Storybird for creating storybooks, Kahoot! for class quizzes, word documents for producing text, etc).

When learners are creating content relating to their lessons, rather than telling them which tools to use, ask them which tools they think will be most useful and why.

Alternatively, when learners encounter different types of content in course materials, ask them to think about which type of tools might have been used to create the content.

Learners could use a digital drawing site such as Sketchpad to draw a map of different tools and what they’re used for, and share them in a digital portfolio.
Creating digital content to solve a problem or complete a task

COMBINING INGREDIENTS

Encourage learners to think of different types of content (such as text, image, video or music) as ingredients that can be combined together to create new content. When learners are producing work, ask them to add different ingredients. When producing a piece of writing, for example, have them type their text in a Word document and add images to support what they’ve written. Similarly, learners could use video creation software such as Animoto to create short videos from their own photos.

Learners could use a digital portfolio, such as Padlet or Bulb to share and comment on each other’s work.
Connecting and interacting with others using appropriate technology

WHAT ABOUT GRANDMA?

Begin by having learners brainstorm examples of different digital communication platforms (such as messaging apps, social media, email or Zoom) and write these on the board.

Choose one or two characters from the coursebook – or people that the learners are familiar with, such as the headteacher, classmates, etc. Ask learners to think about which digital platform they would use to communicate with each character / person. Encourage them to talk about the advantages and disadvantages of each platform, and why they may or may not be appropriate for the characters.

Next, write a list of people on the board (e.g. friends / teacher / parents / grandparents / neighbour, etc) and ask ‘What about Grandma?’ and have learners decide which platform they would use to communicate with their grandmother. Continue with different people, encouraging learners to justify why different platforms are more or less appropriate for each one.

You could invite learners to use a digital mind mapping tool, such as Miro, to organise their ideas about the advantages and disadvantages of different platforms.
Collaborating with others digitally to complete a task

CHARACTER PROFILE
When learners encounter an interesting or unusual character in the coursebook or other material, put them into groups and ask them to brainstorm everything they know about the character. Next, have each group use a collaborative document to create a profile page for their character. Encourage groups to invent and create new information about their character to add to their page. Finally, invite groups to share their profile pages for others in the class to view, comment, and edit.

Why not use breakout rooms for groups to brainstorm their ideas before working on their collaborative document.
Interacting appropriately in a digital space

THE RIGHT WORDS
After learners have listened to an audio recording, read a text or watched a video, choose two of the characters and ask learners to describe the relationship between them. Tell learners to imagine that one character is going to send a message to the other. Ask them to decide which format is most appropriate: text message or email, and invite them to suggest ideas for words and phrases the character might use. You might want to give examples for learners to choose from (e.g. ‘Hello Claire’ / ‘Dear Claire’).

Encourage learners to think about whether the phrases they suggest are friendly / polite, etc. Write the message together as a whole class on the board (or have older learners write their message together in groups). Finally, invite learners to choose emojis to go with the different phrases in their text message / email.

Try reading out different phrases and inviting learners to use the chat box feature to suggest emojis to go with each phrase.
Staying safe online

PUBLIC OR PRIVATE?
At the start of a course or unit, elicit some advantages and disadvantages of sharing online, e.g.:

Advantages:  
• Sharing can help you connect with people  
• …

Disadvantages:  
• Private information can be used to steal your identity  
• …

When learners encounter information about characters in course materials (e.g. a character’s favourite food or home address), ask them to refer back to the list of advantages and disadvantages, and to discuss whether it would be safe for the character to share this kind of information online.

Try creating a Kahoot! quiz on whether it is safe to share different types of information online (e.g. home address / favourite colour, etc), and ask learners to give reasons for their answers.
Maintaining personal wellbeing

SEEING AND BELIEVING

Find one or two edited images online related to the lesson. Show these to learners and ask:

- What do you see?
- How does the picture make you feel?
- Do you believe what you see?

Explain that images are often edited and write some reasons for this on the board, e.g.:

- To make people look nicer
- To make you want to buy something
- To make you want to click on a link

Next, ask learners to discuss how and why the images may have been edited, and how they think the original image would make them feel.

During the course, when learners encounter images in the coursebook or online, encourage them to consider whether it is an authentic original image, or whether it has been edited in some way.

Teaching Online?

Why not create a shared portfolio, such as Padlet or Bulb, for learners to share and comment on images they find.
Safeguarding digital systems and devices

DOES THIS NEED A PASSWORD?
When learners encounter digital devices and online content in course materials (e.g. a mobile phone, a blog post, or a social media account), ask them to consider whether the owner should use a password to protect the device / content. Elicit ideas about the possible consequences of not protecting devices and content with a password.

Extend the task by inviting learners to give examples of good and bad passwords (e.g. good passwords use a combination of upper- and lower-case letters, numbers, and special characters; bad passwords are easy to guess).

Try typing some examples of passwords on your digital whiteboard and have learners vote with a show of hands to decide whether they are good or bad.
Why not invite learners to use the screen sharing function in your online classroom to showcase parts of their portfolio at the beginning or end of lessons.

MY PORTFOLIO
At the start of a course, have learners create a digital portfolio for their work (e.g. using Padlet or Bulb). Encourage them to think about how they want to organise their portfolio. For example, they might have a different column or section for each unit or topic. During the course, encourage learners to use their portfolio as a place to upload and organise the work they produce, along with links to useful resources and online content related to what they’re learning.
Digital Literacy

Making critical judgements about digital data, information and content

SEARCH

Before learners carry out online searches for information relating to a task or project, write the word ‘search’ on the board and explain that each letter stands for something learners should consider when researching a topic. Elicit ideas for what each letter might stand for (see below), prompting learners or giving clues where necessary. Once you have all the words on the board, discuss with learners how the words relate to searching for information, and write the questions below next to each word.

S - Source: What’s the source of this information? Is the source reliable?
E - Evidence: What evidence is there to support this information?
A - Author: Who is the author? Why have they written this?
R - Recency: Is the source recent? How do I know?
C - Clarity: Is this information clear? Does it make sense?
H - Helpfulness: Is this information helpful? Does it relate to my topic?

Teaching Online?

Try setting up an online form with the five SEARCH questions and invite learners to type in their answers as they carry out their research.
Selecting and using appropriate digital tools for specific purposes

VALUABLE AND VERSATILE

Explain the meaning of versatile (able to be used for many different purposes). When learners encounter digital tools (such as word processing or presentation software, video creators, etc) in learning materials or class activities, invite them to tell you whether they like the tool or not, and to give reasons.

Write the questions below on the board for learners to discuss:

Is the tool valuable? Do you need it? How does it help you?

Is the tool versatile? What does it do? What different features does it have?

Why not create a shared document with links to different tools and invite learners to add notes on how valuable and versatile they are.
Creating digital content to solve a problem or complete a task

NEW FEATURES
When learners create digital content (e.g. a Word document, edited image, video or audio file) as part of a class project, ask them to experiment with the features of the tool or platform they are using and try to learn about a new feature or function. Tell learners they can research online to find out about new features they might not already know. When learners present digital content that they have created, ask them to also tell the class what new feature or function they discovered when using the tool or platform.

You could set learners the task of finding out about new features or functions of the learning platform you’re using in your online classroom, and to share what they know in the chat box.
Connecting and interacting with others using appropriate technology

BLOG COMMENTS
At the end of a coursebook unit, have learners write a short blog post about the topic or what they have learned. Set up a class blog, e.g. using WordPress or Blogger, for learners to share their posts. Encourage learners to comment on each other’s blogs, and to respond to each other’s comments.
Collaborating with others digitally to complete a task

CLASS WIKI
Use a Wiki site such as PBWorks to set up a class bank of definitions for new words relating to the topic you’re teaching in class. At the end of each lesson, nominate two or three learners to take responsibility for adding words from that day. Once entries have been added, encourage other learners in the class to modify and update each other’s entries by adding example sentences to illustrate the meaning of new words.
Interacting appropriately in a digital space

NETIQUETTE

Write the word ‘netiquette’ on the board and elicit what it means (the set of rules that is acceptable about behaviour on the internet). Ask learners to think of some examples of netiquette rules, e.g.:

- Avoid typing in all capitals – it’s like shouting
- Use the appropriate register for the person you’re interacting with
- Check spelling and grammar
- Don’t email large files
- Fact check content before reposting
- Keep messages relevant and concise

When learners encounter digital communication texts in course materials (e.g. in the form of emails, chat room conversations or social media messages), ask them to consider whether the material demonstrates good or bad netiquette, and elicit examples.

Try inviting learners to agree a set of netiquette rules for your online classroom.
Staying safe online

CYBERBULLYING: MAKE IT BAD / MAKE IT GOOD

When learners encounter conflict in a coursebook dialogue (e.g. when two characters disagree), ask learners to imagine the conflict is taking place online. Are there any aspects of the dialogue that could be hurtful in an online setting?

Elicit different forms of cyberbullying (e.g. exclusion, harassment, cyberstalking, or sharing other people’s sensitive information) and ways of avoiding or responding to cyberbullying (e.g. showing support for someone being bullied, reporting it to the content provider, or blocking access). Divide learners into groups and ask them to rewrite or extend the dialogue to include aspects of cyberbullying.

Next, have groups swap their dialogues with another group and rewrite the dialogues a second time to include an appropriate resolution in which one or more of the characters responds to the situation.

Try inviting learners to read their extended dialogues aloud to the class and have other class members use the ‘raise hand’ feature to indicate when they notice instances of cyberbullying.
Maintaining personal wellbeing

EMOTIONAL MEDIA

When learners encounter a photograph in course materials, ask them to discuss whether the photo would make a good Instagram photo, and why or why not. Ask the group how Instagram photos might differ from other pictures (People often show an idealised version of themselves on Instagram, and often photoshop images to be more flattering). Ask learners to consider how this might impact on other people emotionally (e.g. photoshopped images can create pressure for people to be perfect and can damage self-esteem).

Learners could use a digital mind mapping tool, such as Miro, to brainstorm and build on each other’s ideas.
Safeguarding digital systems and devices

PASSWORD PARTICULARS
When learners encounter information about characters in course materials, ask them to make notes of everything they know about the character. Then, ask learners to work in pairs to create a computer password for that character based on the information they know. Allow other pairs to try and guess the passwords their classmates have created and discuss which were easy or difficult to guess and why.

Next, invite learners to work together to write a list of dos and don’ts for creating strong passwords (e.g. do use a combination of letters and numbers / don’t use your name as your password). Continue with a discussion about whether or not it is wise to reuse passwords for different accounts and devices.

Why not write some ideas for passwords in the chat box and invite learners to use emoji reactions to indicate how strong they are.
Developing techniques for searching and managing digital data, information and content

EXPLAIN – SUPPORT – MODIFY

When learners have to draw a conclusion about something as part of a class activity, use an Explain–Support–Modify framework like the one in Appendix 5, and have learners write their conclusion in the first part of the framework.

Explain that learners will carry out a web search to find more information about the topic, and ask them to think of relevant and helpful search terms. Have them write their search terms in the next part of the framework.

Next, give learners time to research the topic online, and encourage them to find evidence that explains their conclusion, arguments that support it, and conflicting information that might lead them to modify or revise it. Remind learners to reference the sources they use.

You could ask learners to complete their frameworks digitally and share access for other class members to read and comment.
Digital Literacy

Making critical judgements about digital data, information and content

PERSUADE AND INFLUENCE

Write the words ‘persuade’ and ‘influence’ on the board and elicit definitions from learners:

**Persuade:** to make someone do or believe something by giving them a good reason to do it or by talking to that person and making them believe it.

**Influence:** to affect or change how someone or something develops, behaves or thinks.

When learners encounter information in digital contexts within course materials (e.g. in the form of a website, blog post, or podcast), ask them to consider how the content is authored and what it aims to achieve. Put learners into pairs and ask them to look at the text in detail and find examples of how the author may be attempting to persuade or influence the reader or listener. With web pages and social media posts, encourage learners to also think about any images that accompany the text, and how these might be designed to persuade or influence.

Teaching Online?

Try setting up a ‘Persuade and Influence’ digital portfolio (e.g. using Padlet or Bulb) for learners to create collections of online content that is designed to persuade or influence the reader / viewer / listener.
Selecting and using appropriate digital tools for specific purposes

ONE NEW TOOL

At the start of a module or unit, explain to learners that when they make notes during and after lessons, they will use a digital tool that they haven’t used before. Put some examples of note-taking tools and mind mapping software on the board:

**Note-taking tools:**  
Evernote; Google Keep; Notion; Obsidian

**Mind mapping software:**  
Lucid Chart; Miro; Jamboard; MindMup

Allow learners to add others they might know of and allocate some time for them to search online to find out about some of the tools (e.g. by watching YouTube tutorials and reading user reviews). Next, have learners choose one new tool that they would like to try. Agree a set time (e.g. 4–6 lessons) for learners to use and experiment with the tool.

During the course, encourage learners to use the tool they have chosen to make and organise notes about what they are learning in class. Check in regularly and ask learners to evaluate how valuable they find the tool and why.

Try inviting learners to screenshare examples of the notes they have made to demonstrate some of the tool’s features, and what they like and dislike about it.
Creating digital content to solve a problem or complete a task

FORMAT SWAP

Explain to learners that digital content can be produced in a variety of different formats. Elicit some examples (e.g. image / video / infographic / blog posts / podcasts / websites / social media posts, etc).

When learners encounter a reading or listening text in course materials, set aside some time for them to ‘swap’ the format, by rewriting or reproducing the content in a different digital format. Encourage learners to consider how the content might change in a different format, and how people’s interpretations of the content might differ according to the format in which it is presented.

You could invite learners to share the content they reproduce in a digital portfolio, such as Padlet or Bulb.
Connecting and interacting with others using appropriate technology

PLATFORM BRAINSTORM
Elicit from learners some different types of digital communication platforms (e.g. messenger, email, social media, Zoom).

After learners have listened to a conversation or dialogue in the coursebook, ask them to decide via which platform it would be most appropriate for the characters to communicate. Encourage learners to consider the context, content, and relationship between the characters.

Next, ask learners to rewrite the dialogue for a different platform, and to consider how the language and register might change.

You could ask learners to share their rewritten dialogue in a digital portfolio, such as Padlet, and have other class members comment to try and guess which platform it was written for.
Collaborating with others digitally to complete a task

PRESENTATIONS
When learners deliver presentations as part of their course, allocate groups for learners to work collaboratively, and have them use collaborative presentation software, such as Prezi, Google Slides or Visme to design and prepare their presentation collaboratively. After groups have presented, encourage them to reflect on how they found the process of collaborating digitally, and to discuss the differences between face-to-face and digital collaboration.
Interacting appropriately in a digital space

CODE SWITCHING

Introduce the concept of code switching online (changing your language, behaviour or appearance based on who you’re interacting with). Ask learners whether they ever code switch online and invite them to give examples of when and why they might do this.

Invite learners to share their ideas about why code switching is beneficial, and explain that it can help us communicate more effectively, build positive relationships, and collaborate with different types of people.

When learners encounter digital communication texts in course materials (e.g. in the form of emails, chat room conversations or social media messages), ask them to think of examples of how people might code switch in this context.

You could invite learners to use a digital mind mapping tool, such as Miro, to organise their ideas about how people code switch to suit different online contexts.
Staying safe online

DIGITAL REPUTATION

Elicit the meaning of digital reputation (people’s perception of you based on what they see online) and ask learners to brainstorm examples of what might contribute to a bad digital reputation. Examples might be embarrassing photos, offensive comments, references to illegal or bad behaviour, or personal information.

When learners encounter digital communication texts in course materials (e.g. in the form of emails, chat room conversations or social media messages), invite them to consider how the content might be perceived by others online. Ask learners to identify examples that might contribute to the author’s digital reputation, and whether it might lead to a good or bad digital reputation.

Encourage learners to consider what actions they take online that contribute to their online identity and digital reputation.

Why not use a shared document, such as Google Docs, for learners to add examples of things that contribute to a good / bad digital reputation, and allow learners to refer back to this and add further examples in future lessons.
Digital polls are a great way to get feedback from the whole class. Use a digital poll to find out which problems learners experience most often, or which strategies they want to implement.

Maintaining personal wellbeing

TOO MUCH TECH

When learners encounter digital devices and online content in course materials (e.g. a mobile phone, a blog post, or a social media account), take the opportunity to ask how often they use these types of devices or access this type of content.

Write on the board: ‘How much tech is too much tech?’ and ask learners to discuss. Elicit some physical and psychological problems associated with overuse of technology (e.g. eyestrain, poor posture, sleep problems, reduced attention span, isolation, social anxiety, depression).

Put learners into groups and ask them to brainstorm strategies to prevent or reduce physical and psychological problems caused by the overuse of technology. Examples might be: unfollowing some social media accounts, setting time limits for screen time, or charging one’s phone in a different room at night. Have learners share their ideas with the group, and encourage them to choose a strategy to implement in their own lives.
Safeguarding digital systems and devices

PRIVACY SETTINGS

When learners encounter a text in course materials, ask them to look closely at the content and highlight parts of the text that might need a privacy setting if they appeared in a digital context. Examples might be information relating to a company’s data, private conversations, and personal information.

Extend the task by asking learners how they would protect this content in a digital setting, and elicit examples (e.g. using password protection for files, using end-to-end encryption on messaging platforms, and using privacy settings on social media sites).

Why not set up a collaborative document, such as Google Docs, for learners to build a collection of examples of information that might require a privacy setting in digital contexts.
## Appendix 5: Explain – Support – Modify

Developing techniques for searching and managing digital data, information and content

<table>
<thead>
<tr>
<th>CONCLUSION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What did you decide? What conclusion did you reach? Why?</td>
<td></td>
</tr>
</tbody>
</table>

Think about search terms that might help you to find relevant information online. Write your search terms here.

Carry out a web search relating to the topic.

<table>
<thead>
<tr>
<th>EXPLAIN</th>
<th>SUPPORT</th>
<th>MODIFY</th>
</tr>
</thead>
<tbody>
<tr>
<td>What can you find that explains your conclusion?</td>
<td>What can you find that supports your conclusion?</td>
<td>What can you find that might lead you to modify your conclusion?</td>
</tr>
</tbody>
</table>

Sources:  

Sources:  

Sources: