Digital Literacy

Overview

This online course will provide an overview of digital literacy and how to navigate through the dynamic digital world. In addition to exploring a variety of tools to support digital literacy, such as digital citizenship, resources and implementation strategies will be provided to support educators in their teaching practices.
 (edit using video of woman intro)

Learn

- *What* is Digital Literacy?
    - The Ministry of Education describes Digital Literacy as "the interest, attitude and ability of individuals to appropriately use digital technology and communication tools to access, manage, integrate, analyze and evaluate information, construct new knowledge, create and communicate with others." So what does this mean? In short, it is having the skills needed to survive the digital age. This largely includes communication and collaboration, and being able to find and critically evaluate information, all while being safe.

    - Characteristics

        - The Ministry of Education provides us with six characteristics of Digital Literacy to integrate into our teaching practices.   These give our learners an opportunity to be successful and safe users of the Digital world. These include:

            - *Research and Information Literacy; Critical Thinking, Problem Solving, and Decision Making; Creativity and Innovation; Digital Citizenship; Communication and Collaboration; and Technology Operations and Concepts.*
            - To learn more about these characteristics, see the Characteristic of Digital Literacy in the next module
            - *(make infographic)*

- So *why* is Digital Literacy important?
    - As educators, we cannot deny that technology has changed how students access information. The platform for networking, learning, creativity and collaborating has shifted to the web, and greatly impacted the way we teach, no matter the content area. Navigating the digital world has become a necessary skill to function in our everyday lives.

    - The digital world has brought upon a great shift in our society and the skill-set needed to survive in it. Traditional literacy entailed reading, writing, listening and speaking skills. This

aligned with what the public education system originally embodied. This public education system was created during the industrial revolution. The skills that students needed to know to be successful when they left school were ones that would need to for jobs, which at the time, were mostly working in a factory. These were skills such as the memorization of facts, working alone, following instructions, accepting what you are told, sitting still, and listening to the teacher. These type of skills worked well for the factory model of education.

○ But now, in the 21st century, skills have shifted completely. Computers and machinery and have replaced many of those jobs, and employers are looking for skills that technology and computers cannot do. They are looking to employ individuals that have skills such as critical thinking, creativity, negotiation, self-evaluating and working with others. These skills also need to be able to be transferred and applied to the digital world. Most of today's tasks, access to information and data, collaboration, communication, management, and organization, all rely upon the digital world. As the education system modeled and provided the skill set for students to succeed out in the world in the past century, we need to adjust our teaching to provide our students with knowledge and skills of the 21st century. Being fluent in navigating the digital world, will allow all our students to be set up for success.

○ The four C's are a popular skill set in education that aligns well with the 21st century skills. These include Critical Thinking, Creativity, Collaboration, and Communication.

■ Critical Thinking involves being able to work through, and solve problems. In the digital world, this may require students to be able to separate fact from fiction. Students would need to ask questions, and this would then transfer to their peers, who would also pick up on this skill and enhance or add to the inquiry. Students could focus on research skills when trying to learn about a particular problem, and how to solve it. They will also need to use critical thinking skills when evaluating their searches and sources of information.

■ Creativity connects well with the Critical Thinking piece in that when students are solving problems, they will need to look at it from multiple perspectives, and may try something innovative they haven't before. This would include skills ranging from solving the big-idea, to detail planning and organizing. Creativity also allows students to convey their solution or idea in their own and unique way. Many educators know this as "digital storytelling." This allows students to express themselves in a variety of ways and platforms that they normally would not be able to, because of what the digital world offers us.

- To foster critical thinking and creativity, Collaboration is an essential step.   Students working together to achieve their goal, sets the student up for long-term success. Many of today's careers, tasks, and daily life routines, require collaboration. This enables students to realize they may have new ideas to offer, learn that others have different ideas, and that working together can develop a new idea or way to solve a problem. In your teaching practice, you may have set up your classroom environment in a way where desks and tables were positioned in a way to promote collaboration. In the digital world, you may use a web conferencing technology using video or text, to foster this. This enables students to work together to find an efficient solution to a large problem.

- Communication using the digital world provides countless methods to convey ideas. But having your students understand how to communicate effectively is a separate skill. Understanding that tone, keeping your audience engaged, and being able to keep the focus on how to convey your main idea, especially with all the options the digital world has to offer us, plays a large role in how your message is received.

○ Students today are very comfortable with using technology, and so we assume that means they are "digitally literate." But it is important to note that there is a large disconnect between knowing how to use a device or software, and actually understanding how it can be used to facilitate, access, and support their goals.

○ Supporting our students in becoming digitally literate will give them the skills they need to succeed in our changing world. Almost every aspect in our lives such as employment, government services, education, and health care all have shifted to a digital platform. Enabling our students to be able to navigate this digital world is providing our students with tools and skills to be successful.

○ When thinking about integrating technology into our teaching methods and in our classrooms, one strategy is to use the SAMR model.

- SAMR is a model that allows educators to evaluate how technology might impact teaching and learning. The model is a continuum that progresses from technology acting as a simple substitution of a task, all the way to assisting with the development and creating of new practices.

○ These are the levels of the SAMR model.
- infographic
- The substitution level is where technology is used to perform the same tasks as was done before the use of technology, resulting in NO functional change. For example,

using a note taking app on the iPad. *What will I gain by replacing the older technology with the new technology?*

- The augmentation level is where technology acts as a substitute to what was used before and also results in some functional improvement. For example, using a note taking app and categorizing and tagging notes. *Have I added an improvement to the task process that could not be accomplished with the older technology at a fundamental level? How does this feature contribute to my design?*

- The modification level is where technology allows for significant task redesign. For example, using screen casts to annotate the notes or display the notes as a concept map. *How is the original task being modified? Does this modification fundamentally depend upon the new technology? How does this modification contribute to my design?*

- The redefinition level is where technology allows for the creation of new tasks, previously inconceivable. For example, building in interactive components into the concept map and sharing this with classmates for further collaboration. *What is the new task? Will any portion of the original task be retained? How is the new task uniquely made possible by the new technology? How does it contribute to my design?*

- When using the SAMR model to evaluate digital resources, also consider your class, your individual students as well as the environment. For some students, substitution may make all the difference for the individual, and allow them to express themselves on a digital platform when they could not express themselves at all before. With the digital tools available today, we are able to provide our learners with a voice, access and a choice. This leads to our students understanding what supports and tools they may enhance their quality of learning and means of expression.

o Another key component to Navigating the Digital world is Digital Citizenship. As almost every aspect of our lives has moved to the digital world, including much of our personal information, it is important to teach our students various techniques to ensure they are practicing safe, and ethical use when using the internet.

- *Digital Citizenship* focuses on understanding "human, cultural, and societal issues related to technology and to practice legal and ethical behavior." These include internet safety, privacy and security, relationships and communication, cyberbullying, digital footprint and reputation, self-image and identity, creative credit and copyright, legal and ethical aspects, and having a balanced attitude towards technology.

- ▪ Further information on Digital Citizenship including Mike Ribble's '9 Elements', ISTE's standards, Common Sense's curriculum on Digital Citizenship and many more resources can be found at: https://www.setbc.org/2018/06/digital-citizenship-2018/

Plan

- As a teacher, you can use a variety of tools to enable your learners to become digitally literate. It is important to note that digital literacy is not the responsibility of technology teachers or IT. They may be able to better assist learners when its comes to technology operations, (the how-to of using digital devices), but as educators, if we embed the use of the digital world to achieve our learning goals, we can help our students understand how to use these digital tools to become successful in all subject areas and also in their everyday lives.
- Having so many various technologies and tools has provided us with the opportunity to support our strive to have inclusive classrooms. We are not bound by things in the past, and using these digital tools can enable us to invite all types of learners to participate and feel a part of our classroom environment.

- The planning process when using digital tools begins the same as any other lesson, knowing your learners' strengths and stretches, and having goals for your units and lessons. After you have finalized your goals and objectives for your students, you are then able to apply various technologies to help facilitate and achieve those goals.

- It is also important to keep in my mind that you as the educator, can model using various technologies to assist and enhance your teaching delivery. By demonstrating how you are using the digital world in your teaching practice, your students will be able to transfer these skills into their own practice.

- SAMR
    - The SAMR model can be used to help you evaluate the learning potential of a digital resource. Knowing your learners will allow you to choose specific ways to use technology to give access or enhance your students' learning. In planning for this, resources have been provided to help you through this planning process.
    - https://www.commonsense.org/education/lesson-plans/samr
    - https://docs.google.com/presentation/d/1rc2b8wjG1dshACx0jEECydVaMDuuqYqR0mcL4G-QfuU/edit#slide=id.p
        - ■ Use the "SAMR: Perspective and Organization" activity sheet to identify an area of interest to you that you would like to explore further. If there is an

educational concept that you are interested in that is not on this document, feel free to explore that instead.

■ 3. Think about how you can identify good apps/resources/uses for this area of interest in your classroom that allows you to modify or redefine a particular lesson.

■ Use Google Slides, Prezi, PowerPoint, Keynote or any other kind of presentations tool you know of to create a presentation explaining what you learned and how it helps to redefine or modify your lesson. Include text, images and videos if applicable!

■ Ensure that your slides identifies:
  ● the lesson you would teach (tied to the curriculum)
  ● the concept that you choose to explore further
  ● how this concept allows you to redefine or modify your lesson as per the SAMR model.
  ● Eg. If I was interested in virtual reality and a social studies unit on natural resources, I might look into ways that I could use Google Expeditions or Google Street view to teach my students.

■ Explore these concepts as desired by clicking on the links or searching the Internet.   Organize these concepts in a way that makes sense to you, include explanations and descriptions for why you organized them the way you did.

○
○ Create template

- Digital Citizenship
  ○ There are many ways to include the elements of Digital Citizenship into your classroom. A variety of lessons plans, Common Sense's scope and sequence, Mike Ribble's 9 Elements, and integration methods among various grade levels are provided in the resources tab.
  ○ https://www.setbc.org/2018/06/digital-citizenship-2018/#1447962038934-6dabmjc3c7fa-17e5

Do

- This section will provide various examples of ways educators can effectively integrate digital tools into their lessons. It is organized by task and various digital tools and samples are provided to allow the user to focus on a particular strategy and to give our students the opportunity and skills to navigate and be successful in the digital world.

- **Blogs** to help develop and share inquiry.

- **AR/VR**

- ○ https://education.microsoft.com/skype-in-the-classroom/overview
    - ■ virtual field trips
  - ○ Thinglink
  - ○ Google Tour Creator
- **Social Media platforms** such as
  - ○ Twitter
  - ○ Instagram
- Collaboration
  - ○ Google Docs
  - ○ Google Keep
  - ○ Padlet
- **Digital Storytelling**
  - ○ SHOWME interactive whiteboard
  - ○ Explain Everything interactive whiteboard
  - ○ Aww App is a browser based tool that is a little more limited but has some potential for classroom collaboration.
  - ○ Padlet another digital whiteboard that allows audio, text, hyperlinks and drawing – don't forget to moderate your board if you use it in a classroom!! ;D and notice that commenting can be done without approval so you should consider carefully if you want to allow commenting.
- **MindMapping** has tremendous potential for supporting critical thinking and would make a unique inquiry presentation that a visitor could view and click on links to resources etc.
  - ○ Mindmup (visual brainstorming tool that can be collaborated on – free and shareable)
  - ○ Popplet
  - ○ Prezi might be used to create an even more interactive map.
- **Student Participation**– providing adolescent learners anonymous opportunities to engage, voice their ideas, opinions, questions and understandings while providing teachers with the

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opportunity to gather data to inform teaching (and, potentially, strengthening or stretching student understanding). Remember, it is beneficial to incorporate discussion strategies (such as peer-teaching) when using all-student response.

- Poll Everywhere
- Plickers – a low tech to no tech response system with free downloadable cards and app. The teacher sets up a free account online and then 'gathers' responses by scanning the room with the plickers app on their device. The plickers app acts like a QR code scanner and gathers student responses. *It was interesting to me that one TC suggested having students hold the card in front of their faces if there are concerns about plickers accessing the camera on your device. This reminds us that it is always important to be mindful of student privacy and what we decide to 'trust'…*
- Mentimeter (backchannel chat, all class response, polling etc). *One TC remarked that once they accessed mentimeter, they were already receiving targeted ads – I haven't found that this has impacted my own social media but, again, a good reminder about privacy and making decisions carefully about what you choose to bring into your classroom. Perhaps ensure location services are off for the app? other suggestions?*

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- Plickers (the low tech to no tech response system – free downloadable cards and app)
- Poll Everywhere
- Mentimeter (backchannel chat, all class response, polling etc)

- ○ Padlet (digital white board – don't forget to moderate your board!! ;D and notice that commenting can be done without approval so you should consider carefully if you want to allow commenting. We went deeper

Extra on Digital Literacy Framework

- ○ *Research and Information Literacy* discusses how students "apply digital tools to gather, evaluate, and use information." This includes information literacy, and being able to process and manage information. With so much easy to access information in the digital world, users need to be able to understand and use strategies to evaluate whether websites and information is authentic and legitimate. This includes being able to conduct effective online searches, and interpret and compare information, and then be able to organize the information.

- ○ *Critical Thinking, Problem Solving, and Decision Making*. This characteristic involves using "critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources." This means a student has the appropriate skills when collecting and analyzing data, make informed decisions, build meaningful knowledge, identify and define authentic problems and questions, develop a way to find a solution, and create a representation using the digital tools available to relay the project or solution.

- ○ *Creativity and Innovation* involves students being able to "demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology." These require the student to be able to use a variety of digital media to be able to express themselves and to generate and create new ideas, and digital products. It also includes using digital technology to understand structures and systems, and to recognize patterns and future possibilities. This leads to understanding how meaning is created through multimedia and culture is then produced and spread through social media and the internet.

- ○ *Digital Citizenship* focuses on understanding "human, cultural, and societal issues related to technology and practice legal and ethical behavior." These include internet safety, privacy and security, relationships and communication, cyberbullying, digital footprint and reputation, self-image and identity. creative credit and copyright, legal and ethical aspects, and having a balanced attitude towards technology.
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- *Communication and Collaboration* is a vital component to Digital Literacy. It involves students being able to "communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others." the ability to connect, share, communicate and collaborate with others provides an engaging experience an opportunity for students to access information and work with others they normally would not be able to. Essentials skills involve understanding the purpose, audience and how to convey tone when interacting others online, how collaboration involves etiquette, co-constructing content with various people, and how to communicate and contribute ideas effectively using various media.

- *Technology Operations and Concepts* involves learnings being able to show "understanding of technology concepts, systems, and operations, and develop computational thinking skills." The *operations* part of this component is what most assume to be the main characteristic when it comes to digital literacy, yet it is only a part of it.   This involves knowing how to use the software and hardware. This involves being able to use digital devices, general computer skills, using programs and apps, download, access and create content, but also using the technology to participate in online actions such as petitions and lobbying, conducting transactions online such as paying bills, applying for jobs, shopping online or booking a trip. Users are also able to access various types on information online such as the news, sports, entertainment etc. This component however also involves being able to evaluate which type of technology is the most appropriate for their achieving their goal or purpose and making an informed decision. This then allows the the student being able to continue using digital media to learn, connect to the world, learning to work and adapt to new digital technologies, achieve goals and solve problems by effectively using the technology, and knowing what to do when there is a technical problem.