Course: How to use technology to find, filter and apply information

Find, Filter, and Apply is a vital skill students will need when it comes to developing their ability to identify real world problems that exist and create solutions to solve them. This course will provide instructional material and a framework to help develop your students do so.

Find - The internet has created an infinite sea of information accessible to students. It is essential that students understand how to find the information they need to solve a problem and utilize tools which will be most efficient to do so.

Tools that we may cover: Google, YouTube, Social Media, WolfRam Alpha

Filter - With the vast amount of information that exists, it also has created information that may or may not be accurate. Students will need to know how to validate the information they find by determining the accuracy and relevance of the information, and the author's perspective and credibility.

During this course, we will provide a tool that may be used to assess the accuracy of any information.

Apply - Once accurate information has been obtained, students must apply that information to create something new that contributes to solving the problem at hand. We will provide instructional materials to assist students in creating content out of the information they find.

Tools or concepts that we may cover are: Draw.io, Google Documents / Sheets / Presentations, Project Proposal Templates, Design Thinking Process, Communication tools, Blogs/Podcasts/Videos etc.

Final outcome for students - After this course has been successfully implemented, your students should be able to utilize the internet to find accurate information and then use that information to solve real world problems.

Course Overview & Learning Outcomes

Section 1 - FIND - The New Age Encyclopedia (Google)

Develop your students' knowledge and ability to use tools like Google in order to find relevant information.

1. Find relevant and accurate information to inform your practices

2. Demonstrate proficiency in using the feedback from various sources to improve their practices

3. Persevere in problem-solving and critical thinking

Section 2 - FIND - The New Age Magazine (Social Media)

Help students understand how to explore social media as an unconventional pathway for finding current information.

- 1. Identify Safe, Ethical, Legal, Positive social digital content
- 2. Apply cross-platform use of #s to discover information
- 3. Create Safe, Ethical, Legal, Positive social digital content
- 4. Explain the value of Safe, Ethical, Legal, Positive social digital content

Section 3 - FILTER - How to Verify Information for Accuracy

As your students start to successfully find information, we want to develop their ability to measure the validity and reliability of that content using the FFA (Find, Filter, and Apply) Tool.

- 1. Demonstrate proficiency using the FFA Tool
- 2. Identify a source's bias & perspective, relevance, credibility, accuracy

3. Examine claims & information to determine truthfulness and credibility (Fact Checking 101)

Section 4 - APPLY - Using Digital Tools to Solve Problems

Help students use Web 2.0 tools, like Draw.io, to create digital assets that will support them in solving problems in their life.

- 1. Analyze complex puzzles using computational thinking
- 2. Design a puzzle flow map (Blueprint) using web 2.0 tools
- 3. Create a playable puzzle

Section 5 - APPLY - Using Design Thinking to Solve Problems

Develop how your students think and approach problems by using the Design Thinking method to solve problems.

- 1. Design solutions to problems using the design thinking model
- 2. Develop test and refine a prototype as part of a cyclical design process
- 3. Apply Innovative thinking to apply innovative design

Section 6 - APPLY - Creating and Publishing Content to Solve Problems

Teach students how to create digital content that communicates a complex message creatively and efficiently.

- 1. Synthesise complex information and be able to effectively communicate it
- 2. Design & create digital elements using Web 2.0 Tools
- 3. Author their own video & audio content

Section 7 - APPLY - Using Find, Filter and Apply to Solve Problems

Using everything students have learned so far in the course, help them now solve a real world problem that exists in their community.

- Creative problem solving
- Use Critical thinking to connect seemingly unrelated pieces of information together
- Collaborate with team members to generator solutions to complex problems