



INTENTIONAL SKILLS ATTAINMENT

Innovative Thinking & Problem Solving (Optional Session)

ESTIMATED TIME REQUIRED



60 minutes

OVERVIEW

This session highlights the value of developing skills related to information and technology literacy and innovative thinking and problem solving as necessary skills in preparing for post-service education and career opportunities. In this session, your service year corps members will explore and build information and technology literacy skills. Additionally, your corps members increase their knowledge of developing creative and innovative ideas, while also evaluating information by asking questions, making connections, and identifying patterns to solve problems.

LEARNING OUTCOMES



By the end of this session, your corps members will be able to:

- Define Information and Technology Literacy
- Identify skills related to Information and Technology Literacy
- Demonstrate using evaluation tools to assess information sources
- Identify skills related to Innovative Thinking and Problem Solving
- Explain how Innovative Thinking and Problem Solving work together

TRAINING SESSION RESOURCES

Before getting started with this training session, you should review the Preparation section below and familiarize yourself with this guide's Session Script. This session should be presented directly to corps members using this downloadable presentation:

- **Downloadable Presentation:** [S7: Training Session: Information & Technology Literacy and Innovative Thinking & Problem Solving](#)

The downloadable presentation includes speaker notes for program staff who are facilitating this session directly to corps members, making it easy for staff to walk through the presentations efficiently and effectively.

HELPFUL TIP



This session is **optional** and specifically designed to support service year programs where their service year corps members play a vital role in processing information, using technology resources, and addressing problems through innovative solutions as a part of your service year program's intervention. Additionally, this session may be useful if you find that many of your corps members are seeking post-service opportunities that require these skills

PREPARATION

Trainer Expectations

Throughout this training session, trainers will be asked to facilitate the group through small group discussions and full group discussions. Some of the topics may feel challenging for your corps members to engage with, and they may not want to engage in conversations on these topics at first. Part of fostering a belonging environment is making the space equal with corps members and program staff. Therefore, we recommend you, as the facilitator, prepare responses to the questions posed to the corps members throughout the session as a strategy to help spark conversation if needed. Before beginning this session, review the Session Outline & Script below and ensure familiarity with the content to be prepared to facilitate activities and answer potential questions from corps members. You'll notice in the Session Outline there are resources linked to provide background on the subject matters included in this training.

Necessary Materials

- Corps members' journals
- Pen and paper to complete the handouts
- One note card per corps member
- One printed copy for each corps member:
 - [S7: Resource: Information & Technology Literacy](#)
 - [S7: Resource: Innovative Thinking & Problem Solving](#)
 - [S7: Resource: Lateral Thinking Activity \(one printed copy for each group of 3\)](#)
 - [S0: Resource: Glossary](#)



Virtual Modifications

If you plan to facilitate the training session in a virtual environment, we recommend the following modifications:

- Use a whiteboard that can be displayed on camera or share your screen and work in a word or google document
- If you have group break out sessions, set up the groups in advance via your video conferencing software
- Don't forget to send an email with any necessary handouts (see printed materials above) in advance of your remote session

	TIME ESTIMATE
	LEARNING OUTCOMES
	VIRTUAL MODIFICATION
	ACTIVITY
	HELPFUL TIP

HELPFUL TIP

Your service year corps members will use their [Employability Skills Inventory](#) for this session and throughout the rest of the program year. Encourage them to keep it in a safe place or collect it each time they use it.

SESSION OUTLINE

The following outline walks you through what to expect throughout this session and how to prepare.

I. Activity: Personal Slogan icebreaker - full group



Prep needed: you will ask corps members to think about and share their personal slogan. Make sure you have one for yourself to get the conversation started.

II. Overview of Information & Technology Literacy

You will introduce the rubric created to help assess proficiency indicators within this skill.

Necessary materials: [S7: Resource: Information & Technology Literacy](#)

ACTIVITY: Resource Evaluation - full group



Necessary materials: You will invite corps members to utilize the Currency, Relevance, Authority, Accuracy, Purpose (CRAAP) test on a website or online resource. You should confirm they will all have access to a smartphone or laptop. If they don't, you can still introduce this concept but should suggest they apply the learnings as a takeaway from the session.

III. Overview of Innovative Thinking & Problem Solving - you will introduce the rubric created to help assess proficiency indicators within this skill.

Necessary materials: [S7: Resource: Innovative Thinking & Problem Solving](#)

IV. Problem-solving vs Innovative Thinking - you will define the differences between problem-solving (doing) & innovative thinking (imagining).

Prep needed: This concept was informed by this resource, if you'd like to read more about it.

ACTIVITY: Lateral Thinking Activity - small groups



Necessary materials: You will present each small group with a different page from this [Lateral Thinking Activity packet](#), with a problem to solve. Make sure you hold onto the [answer key](#). These problems were pulled from [this resource](#), if you need more than 10 or want to find different puzzles.

V. Wrap Up

You will wrap up this session by facilitating a group discussion on their thoughts about what they learned today.

VI. Exit Ticket Activity



As a final close out, you will ask corps members to write some tips you have for anyone participating in this session and leave it in the tip jar upon exiting the session.

Necessary materials: Provide 1 notecard for each corps member for activity

SESSION SCRIPT

The following script should be used for presenting this session directly to your corps members. It is recommended that you review this script before beginning the session. Italicized prompts are intended to be guidance for you as the trainer rather than part of the script you will communicate to your corps members.

Slide #1

Welcome to our session on Information & Technology Literacy and Innovative Thinking & Problem Solving.

Slide #2

We are going to start with a little exercise to get to know each other and show our creative sides. Many companies have mottos or slogans. Today we are going to come up with our own. For example: Nike's slogan is "Just Do It." KFC's slogan is "Finger Lickin' Good."

Your slogan should reflect your values and personal style. Think of your own or borrow one that may fit you. I'll give you 2 minutes to brainstorm, then we'll go around the room and I will ask everyone to share.

Allow 2 minutes for corps members to think of their slogan. After the time has elapsed, go around the room and have each person share. To break the ice, you may want to share your own slogan first.



Use the chat or ask corps members to get off mute and share. Make sure everyone shares!

Slide #3

Here is our agenda for the day:

We will first take a look at information and technology literacy and what it means for how you find and use information. We will then take what we learned and put it into action using the CRAAP Test. Next, we will look at innovative thinking and problem solving and talk about how these concepts work in tandem with each other. You will then get a chance to use those skills to solve some lateral thinking word problems. We'll end with a virtual tip jar detailing what you have learned or would like to share with others. Let's get started!

Slide #4

Let's start today's session with information and technology literacy. What is this?

Slide #5

An integral part of information literacy is knowing where to find information and how to determine if that information is accurate and appropriate.

The Information Literacy Group's definition of information literacy is: "a set of skills and abilities which everyone needs to undertake information-related tasks; for instance, how to discover, access, interpret, analyze, manage, create, communicate, store, and share information."

But it is much more than that – information literacy concerns the application of the competencies, attributes, and confidence needed to make the best use of information and to interpret it judiciously. It incorporates critical thinking and awareness, as well as an understanding of both the ethical and political issues associated with using information.

Slide #6

Take a look at this descriptive list from the [Information & Technology Literacy rubric](#):

- Ability to effectively use technology to access, evaluate, create and communicate information.
- Ability to locate and incorporate relevant media sources.
- Knowledge of specific tech skills like Microsoft Word, Google Suite, Dropbox and Zoom, and project management tools like Slack.

Take 3 minutes to reflect on where you think you are with some of these areas. What questions do you have? Are there any areas where you are unsure? After you reflect, we'll discuss.

Allow 4 minutes for large group discussion.



Use the chat or ask corps members to get off mute and share.

Slide #7

Take a moment to think about how you find and use information by answering these questions in your journal. There are no wrong answers here.

- Question #1: Where do you go for trusted information and news? (websites, other media, personal references, etc.)
- Question #2: How do you know that you can trust the information you get from these sources?

After a minute or two of reflection, encourage corps members to share their answers. You can prompt the discussion by asking:

Were there any sources you listed that might not always be trustworthy – like Wikipedia or Facebook? Pay special attention to those. It's okay to use these less rigorous sources to start, but you always want to verify information you find online with multiple credible sources like academic journals or qualified writers and researchers.



Use the chat or ask corps members to get off mute and share.

Slide #8

Being able to evaluate information for your personal, professional, or academic life is an important skill to master. There are many tests that you can use to guide you through the evaluation process. Today, we are going to focus on the CRAAP Test.

Introduce the CRAAP Test based on the descriptions on the next page.



The CRAAP test analyzes information based on the following areas:

Currency: the timeliness of the information.

- When was the information published or posted? Has the information been revised or updated? Is the information current or out-of-date for your topic? Are the links functional?

Relevance: the importance of the information for your needs

- Does the information relate to your topic or answer your question? Who is the intended audience? Is the information at an appropriate level (i.e. not too elementary or advanced for your needs)? Have you looked at a variety of sources before determining this is the one you will use? Would you be comfortable using this source for a research paper?

Authority: the source of the information

- Who is the author/publisher/source/sponsor? Are the author's credentials or organizational affiliations given? What are the author's credentials or organizational affiliations? What are the author's qualifications to write on the topic? Is there contact information, such as a publisher or e-mail address? Does the URL reveal anything about the author or source? Examples: .com (commercial), .edu (educational), .gov (U.S. government), .org (nonprofit organization), or .net (network)

Accuracy: the reliability, truthfulness, and correctness of the content

- Where does the information come from? Is the information supported by evidence? Has the information been reviewed or refereed? Can you verify any of the information in another source or from personal knowledge? Does the language or tone seem biased and free of emotion? Are there spelling, grammar, or other typographical errors?

Purpose: the reason the information exists

- What is the purpose of the information? Is it to inform, teach, sell, entertain, or persuade? Do the authors/sponsors make their intentions or purpose clear? Is the information fact? Is it opinion or propaganda? Does the point of view appear objective and impartial? Are there political, ideological, cultural, religious, institutional, or personal biases?

Ask corps members to choose a website they might go to for information and judge it based on the CRAAP Test. Ask volunteers to share what they found and if there were any surprises.



Use the chat or ask corps members to get off mute and share.

Slide #9

Being able to accurately understand where information comes from ties into our next skill, being an innovative thinker and problem solver. Having a good base for your knowledge will then allow you to be more confident in how you create new, innovative ideas and solve existing problems.

Slide #10

Take a look at this descriptive list from the [Innovative Thinking & Problem Solving rubric](#):

- Thinking creatively, and developing ideas and approaches to design challenges.
- Researching, analyzing, and determining causes of issues and deciding the best way to solve them.
- Supporting one's claim or position with substantial evidence and logical reasoning.
- Generating questions, making connections, identifying patterns, and evaluating information to aid problem solving and solution finding.

Take 3 minutes to reflect on where you think you are with some of these areas. What questions do you have? Are there any areas where you are unsure? After you reflect, we'll discuss.

Allow 4 minutes for discussion.



Use the chat or ask corps members to get off mute and share.

Slide #11

Innovative and creative thinking is something that comes easily to some of us and maybe not so easy to others. How would you describe innovative thinking in your own words?

Allow 3 minutes for discussion.

There are many definitions of innovative thinking, so you are all on the right path. Let's look at innovative thinking and as it relates to problem solving.



Use the chat or ask participants to get off mute and share.

Slide #12

Innovative thinking is divergent. Divergent means things can develop in different directions. In innovative thinking, we look at the problem as a whole and think of how it can be improved or envisioned in a different way. What possibilities can be used to solve the problem? This is classically called: out-of-the-box thinking.

Another way of thinking about innovative thinking is, "What are all the possible ways to address the situation."

Problem solving is convergent. Convergent means things come together in a singular direction. In problem solving, we must consider the topic and what rules and logic apply to the problem. How do the different parts relate to each other? This is classically called: in-the-box thinking. Another way of thinking about problem solving is, "Which solution seems most promising and how do we go about solving it."

Slide #13

Problem solving and innovative thinking work in tandem. You can use innovative thinking to imagine solutions to a problem you are working to solve. In this diagram, problem solving steps are on the left in red and innovative or creative thinking steps are on the right in blue. You might notice that problem solving is about doing while innovative thinking is about imagining.

Slide #14

Prior to this activity, choose scenarios from the [Lateral Thinking Activity](#) packet provided in the Session Outline and bring copies of different scenarios to give to the teams – this will depend on your group size. Each of the scenarios have a potential answer to help you wrap up the activity. Those answers can be found in the [answer key](#) resource.

In this next activity we are going to divide into teams to solve a lateral thinking scenario. I will provide you with a scenario and give you 5 minutes to discuss what you think the answer might be.

Divide the corps members into multiple even teams. If you think it would be helpful, provide the whole group with a sample scenario and answer so they understand what will be involved. After 5 minutes, pull the group back together and have the group debrief. Have the groups share the answers they came up with and provide the correct answer as necessary. Facilitate any discussion about their takeaways that may be helpful to point out the importance of innovative thinking and problem solving skills.



Use breakout rooms and chat to share.

Slide #15

Let's wrap up our discussion with any questions, comments, or thoughts you have about everything we discussed during today's session.

Allow this time to be an open discussion.



Use the chat or ask corps members to get off of mute to share.

Slide #16

Hand out a notecard to each corps member to complete the exit ticket.

Thank you all for your time and attention today! It was fun hashing this stuff out with you! The last thing I am going to ask you to do is fill out an Exit Ticket. On the notecard provided, tell me what tips you have for the next person participating in this session. It can be something you knew before this session or something you learned today.



Use the chat or ask participants to get off of mute.