



This resource is to encourage and support you on your learning journey; it provides tips and tricks to deepen your knowledge, feed your passion, and build your future-ready skills.

It's a future-forward journey where you:

- Accept the challenge to self-reflect
- Engage in learning to build your knowledge and skill sets
- Identify your passion and priorities
- Design innovative solutions for real-world problems
- Tell the world about your findings and solutions

**SO...WHAT IS
TAKING CHARGE OF YOUR LEARNING?**



REFLECT

Think deeply about your aspirations and purpose.
(Return to this phase throughout your learning.)



STRETCH

Expand your knowledge and Future Ready skills through active learning.



INNOVATE

Create solutions for problems you're passionate about solving.



SHOWCASE

Share your innovations with an audience in a format that's captivating.



REFLECT

Self-reflection is a way to begin to know who you are, what you want for your future, and how to plan for success.

Stop and listen to yourself as you answer these questions:

- What do you want as a career?
- What are your special skills, talents, and strengths?
- What are your passions?
- How do you want to serve and contribute to your community?

Watch and replay [The What & How of Self-Reflection](#), and jot down the following:

- 3 things you learned
- 2 aha! moments
- 1 question you still have



Check out more reflection questions in our ["For Learners: Extras"](#) resource!



REFLECT

Gauge your skills and competencies. Knowing where you excel and where you can improve is a key part of being a learner and professional.

Use this tool to **REFLECT** on your professional competencies and Future Ready skills. Rate each one as Discovering, Developing, or Doing, and use your ratings as an invitation to **STRETCH** and grow in these areas. (It's OK to not be perfect at everything but do strive to hone each skill!)

You will rate yourself using this proficiency scale:

Discovering – I am learning more about this skill before I develop and do it!

Developing – I am working on this skill but still have room to grow.

Doing – I excel here and can show what I know!

ENGINEERING PROFESSIONAL COMPETENCIES & FUTURE READY SKILLS

COMPETENCY & SKILL	DESCRIPTION	PROFICIENCY RATING		
		DISCOVERING	DEVELOPING	DOING
SCIENTIFIC FUNDAMENTALS	<ul style="list-style-type: none"> Possesses a strong fundamental understanding of relevant scientific disciplines (e.g., physics, chemistry) 			
ADAPTABILITY	<ul style="list-style-type: none"> Possesses a strong fundamental understanding of relevant scientific disciplines (e.g., physics, chemistry) 			
CREATIVITY	<ul style="list-style-type: none"> Devises new ways to carry out tasks, solve problems, and meet challenges 			
COMMUNICATION	<ul style="list-style-type: none"> Expresses ideas effectively (verbal, non-verbal, and visual) and demonstrate active listening 			
TEAMWORK	<ul style="list-style-type: none"> Fosters an inclusive environment in which people are involved, valued, and have a sense of ownership 			
FOCUS ON RESULTS	<ul style="list-style-type: none"> Drives obligation to closure with precision to benefit the organization and every constituent 			
EMOTIONAL INTELLIGENCE	<ul style="list-style-type: none"> Uses and manages one's own emotions in positive ways to empathize with others, overcome challenges and defuse conflict 			

Sources: Raytheon Technologies



STRETCH



Transform your self-reflection into self-action by seeking out and taking part in learning activities or career-based experiences that develop your knowledge and skills.

MOVE FROM DISCOVERING TO DEVELOPING TO DOING

For the competencies and skills you rated as “Developing” or “Doing,” create a game plan to STRETCH your learning so you can move to “Doing” with confidence!

Think about activities you can engage in to further develop each competency and skill. (Explore FREE online courses or seminars, industry certification exams, informational interviews, internships, readings, or videos...then, take your skills for a test drive in your job, classroom, a mock interview, etc.)

YOUR STRETCH GAME PLAN

WHICH COMPETENCY OR SKILL WILL YOU WORK ON?	HOW WILL YOU STRETCH YOUR LEARNING? (You can also add resource links to return to anytime.)	WHO WILL BE YOUR ACCOUNTABILITY PARTNER? (Consider a classmate, your educator, employer, or mentor.)	WHEN WILL YOU COMPLETE YOUR STRETCH ACTIVITY?	HOW WILL YOU KNOW THAT YOU IMPROVED?



REMEMBER, it's important that we don't see developing our skills as the end of our learning journey. Career trends are always evolving, so be sure to reflect and re-assess your competencies and skills along the way!



INNOVATE

Think about a Passion Project where you can combine your knowledge, skills, and creativity to solve a problem you see in the world.

It provides an opportunity to:

- Dive deeply into topics that interest YOU
- Think BIG and solve a real-world challenge
- Separate YOURSELF from hundreds of other college or job applicants



SO...WHAT IS
A PASSION PROJECT?

REFLECT ON A -



- real-world problem that you want to solve
- passion project that aligns with your purpose
- a social, political, economic, or industry-related issue you can impact with your voice (the possibilities are endless)

STRETCH YOURSELF BY -



- exploring and investigating various mediums to learn more about your topic
- expanding your understanding of diverse perspectives on a problem
- becoming an agent of change

INNOVATE BY -



- generating ideas through big-picture thinking
- implementing design thinking
- collaborating with peers, mentors, employer partners, and/or alumni
- using the Innovate Choice Board on pg. 5



Check out these videos on
Passion Projects and how they
enhance your Future Ready journey:

- [Passion Projects for High School](#)
- [The Key to College Acceptance](#)
- [What is Project-based Learning](#)

SHOWCASE YOUR WORK BY:



- sharing your solutions and innovations to a panel or audience (think advisory board members, mentors, alumni, and/or community and business leaders)
- publishing your presentation (social media, webpage, digital portfolio)
- considering the ideas on the Showcase choice board on pg. 6

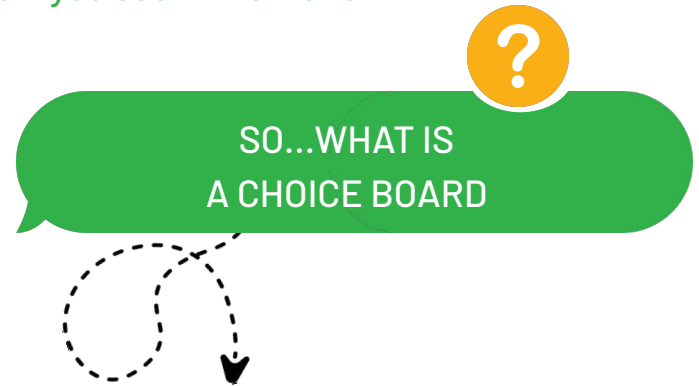


INNOVATE

Using the choice board below, select a Passion Project where innovation becomes an action! You can combine your knowledge, skills, and creativity to solve a problem you see in the world.

A CHOICE BOARD is intended to:

- personalize the learning experience by giving you multiple options
- inspire ideas for how you can innovate
- tap into your voice and what you love to do



SOLVE A PROBLEM FOR A LOCAL BUSINESS OR ENTITY

In your community there may be small businesses or community centers that need your prowess. How can you support them be more sustainable, marketable, successful, so your community continues to thrive? You can build your skills and [support small businesses](#) at the same time!

REDESIGN A PRODUCT

Is there an existing product that has flaws you would like to fix for a more diverse group of users?

Think about bias in a digital or non-digital product and how you might revamp it to support more users. Perform some user testing on a chosen product, tap into your [empathy for the diverse user](#), then use that feedback to improve and recreate a product.

COMPLETE ONE OF NAF'S PASSPORT EXPEDITIONS

Complete an authentic learning project called a Passport Expedition that ties into various career pathways. (Check out our Expeditions in [Finance](#), [Tech](#), [Engineering](#), [Hospitality & Tourism](#), and [Health Sciences](#).)

INNOVATE A SOLUTION PERTAINING TO A UNITED NATIONS' SUSTAINABLE DEVELOPMENT GOAL (SDG)

Explore the [SDGs](#) and determine which issue you are passionate about addressing. Once you find one, develop multiple solutions to the same problem then choose one to iterate.

Consider completing [NFTE's World Series of Innovation Challenge](#). (New challenges launch each Fall.)

CHOOSE YOUR OWN FORMAT

If there is something else you would prefer to do, that's OK! Talk it over with your educator or mentor, then GO FOR IT!



SHOWCASE

Showcase your innovations in a captivating and powerful way, whether that's to your class, a group of industry leaders, your community, or a global audience.

LAUNCH A YOUTUBE VIDEO

Detail your product, give a tutorial on your innovation, or share your learning journey in an engaging [video](#).

DEVELOP A SOCIAL MEDIA SERIES

Elevate your voice and innovations through digital content on a social media platform of your choosing. Raise awareness around your problem and solution through a steady series of text, graphics, and data. Create #hashtags that relate to your theme to generate more buzz.

Take a look at [6 Simple Tips to Amplify Your Social Media Activism Campaigns!](#)

SHARE YOUR FINDINGS WITH A LIVE OR VIRTUAL AUDIENCE

Present your innovations with your class, a mentor, or connect with the academy's Advisory Board. Pretend you were asked to share your innovation for a news show.

Allow for Q&A, then solicit feedback on the quality of your visuals and how you shared your findings.

CHOOSE YOUR OWN FORMAT

Showcase your project in a way that would best amplify your learning and your innovation. (Think about a blog, webpage, apps, AR posters, 3D product, TedX Talk, a competition, etc.)

CREATE A PODCAST

Record a series of talks, then make it available on the Internet or podcast apps.

Check out [Starting Your Podcast: A Guide for Students](#) and [NPR's Student Podcast Challenge](#) and sign up for the newsletter. Who knows? You may be the next winner!



We'd love to see what you created! If you would like to share it with NAF, email curriculum@naf.org. Please obtain your educator's permission before sharing (or have them email it on your behalf).

CREATE A PECHAKUCHA

A PechaKucha is a 20x20 visual storytelling presentation that showcases your 20 chosen images, each for 20 seconds. Basically, you have 400 seconds to tell your story, with captivating visuals guiding the way.

Visit the [PechaKucha](#) site to create your story and publish your innovations to a global audience.



Take a look at the Passion Project Resources in our [For Learners: Extras!](#)



SHOWCASE

No matter how you choose to showcase your passion project, you should also share your product and learning journey in a digital portfolio.



SO...WHAT IS A DIGITAL PORTFOLIO?

A digital professional portfolio is an online collection of:

- professional documents and media that highlight your knowledge, skills, abilities, and academy experiences.
- your best work samples and projects
- multimedia that SHOWS how you learn, innovate, and share your work with others
- evidence of improvement or proficiency in work-related competencies



1

Create a digital portfolio using

[bulb](#), [Google Sites](#), [Git Hub](#), [Equedi](#), or the like.

(They each have their own nuances and limitations, so pick one that works best for you.)



Click [here](#) to watch a video of a sample digital portfolio!

2

Upload assets in different media. Think about passion projects, favorite classroom projects, reflections, internships or other work-based learning, extra-curricular activities, etc.



3

Add your portfolio link to your resume, business card (or cell phone contact), college essays, or job applications.

Take a look at the Professional Portfolio Checklist in our "[For Learners: Extras](#)" resource!