New Hampshire
Department of Education

Learn Everywhere Program Initial Application

1.0 Applicant Information [Ed 1403.01(a)(2)].

Organization Name: WinnAero ACE Academies

Name of Primary Contact: Daniel Caron

Mailing Address: Laconia Airport, 65 Aviation Dr, Gilford NH 03249

Email Address: dan.caron@winnaero.org

Phone Number: 603-556-9762

2.0 Purpose, mission statement, or both [Ed 1403.01(a)(1)].

The Big Idea

When students hear the words "Aviation and Aerospace" they think of pilots and astronauts. The career fields of Aviation and Aerospace include hundreds of careers beginning on the surface of the Earth, extending into the atmosphere and reaching through the solar system to the edge of the universe.

Goals

To use aerospace activities as the vehicle to demonstrate the interrelationships of STEM subjects: science, technology, engineering, and math,
To develop an awareness of the variety of careers in the aerospace field,
To encourage students to explore a variety of aerospace careers,
To provide hands-on experiences for students as they use technology related to aerospace careers.

3.0 A description of the demonstrated instructor qualifications required for the program(s) and a statement assuring that the instructor(s) satisfies those qualifications [Ed 1403.01(a)(3)].

WinnAero/ACE Academy instructor qualifications

Bachelor's degree, Master's degree preferred,
Current teaching credential,
Current employment in a New Hampshire recognized public or private school,
STEM teaching experience or experience teaching one of the STEM disciplines,

An interest in aeronautics and /or astronautics.

WinnAero ACE Academy will assure any of its Learn Everywhere instructor's meet the above qualification requirements.

4.0 A criminal history records check policy that includes a statement affirming that the sponsoring entity shall not allow instruction or student contact by a person who has been charged pending disposition for, or convicted of, any violation or attempted violation of any of the offenses as outlined in RSA 189:13-a, V pursuant to a criminal history records check conducted by the department of safety as outlined in Saf-C 5703.06 through Saf-C 5703.11 [1403.01(a)(4)].

WinnAero ACE Academy affirms that it shall not allow instruction or student contact by a person who has been charged pending disposition for, or convicted of**,** any violation or attempted violation of any of the offenses as outlined in RSA 189:13-a, V pursuant to a criminal history records check conducted by the department of safety as outlined in Saf-C 5703.06 through Saf-C 5703.11. WinnAero ACE Academy will inform parents of its criminal history records check policy upon enrollment of their child in the Learn Everywhere program.

5.0 For the proposed instructional program(s), identify the education, program, or opportunity from Ed 306.27*(v)* for which students completing the learn everywhere program shall receive high school credit(s) [Ed 1403.01(b)(1)(a)].

There are three courses offered that are based in Technology & Engineering and Physical Sciences: Aerospace Engineering/ Manufacturing, Drone/UAS Academy, and Systems Tool Kit. The fourth course being offered is based in Technology & Engineering and Life Sciences: High Altitude Effects on the Human Body. Each of the four courses would be awarded a certificate for credit toward High School graduation as an "Open Elective".

6.0 An outline of each program for which approval is sought, which includes goals, competencies, a detailed description of the course of instruction, and a description of expected student outcomes [Ed 1403.01(b)(1)(b)].

WinnAero Aerospace Career Education (ACE) Academies
Program Goals and Performance Objectives
(From the NHTEA Technology & Engineering Education Curriculum Guide R2022)

The recent revision of the NHTEA Technology & Engineering Education Curriculum Guide R2022 has been updated using the ITEEA Standards for Technology & Engineering Literacy as a guide. The NHTEA Technology & Engineering Curriculum Guide illustrates where our state grade level performance objectives correspond to the technology and engineering standards from ITEEA STEL. The ITEEA STEL document explains the process of comparing the STEL Benchmarks to the Benchmarks from NGSS, CCSS and CCSS ELA. ITEEA STEL can be viewed as a free download from iteea.org and a link to the STEL ETOOL is on the ITEEA home page.

NHTEA Goals: Technology/Engineering Education will contribute to the development of all students by:

A. Providing opportunities to utilize the engineering design process to overcome real world situations using age appropriate, thematically related, and hands on solutions.
B. Encouraging those habits of mind necessary to a lifelong learner, such as the ability to question, investigate, design, experiment, and evaluate.

C. Providing opportunities to develop safe and appropriate skills, and awareness of a wide range of traditional and contemporary technologies.
D. Preparing students to recognize, use, prepare (and communicate) technical information in order to engineer solutions to problems related to a variety of technological systems.
E. Promoting an appreciation for the interdependency of technology and other disciplines.
F. Increasing understanding of the (current and historical) relationships between technology, individuals, and society.
G. Providing an introduction to the impact technology has on society and the environment.
H. Providing opportunities to plan, develop, operate, control and maintain a variety of technological systems such as medical, agricultural, biological, energy and power, information and communication, transportation, manufacturing, construction, robotics and automation and emerging technologies.
I. Encourage the development of (career awareness and) leadership abilities. Through (classroom activities and) participation in extracurricular activities such as the Technology Student Association and other Career & Technical Student Organizations, Design Challenges, and projects that support their communities.

Performance Objectives: The student will be able to:

Grade 9-12	
A8	Design, develop, manage, and evaluate activities using identified problem-solving techniques.
B5	Demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.
B6	Evaluate the use of technology to solve issues.
B7	Design and propose solutions at the global level.(state, national, international)
C6	Exhibit the safe and proper selection, use and maintenance of technical equipment (both digital and physical), materials, and processes.
C7	Students will recognize and demonstrate safe, appropriate and ethical use of information technology.
D11	Demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.
D12	Select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.
D13	Recognize and Demonstrate ethical collection, use, and communication of data, with integrity and limited bias.
E5	Integrate the engineering design process and knowledge from other academic disciplines to develop solutions to real-world problems.
F8	Evaluate the effects of technology's development on society through time.
F9	Evaluate examples of how technological systems and processes have developed to satisfy human needs and wants.
G7	Analyze technology's impact on society and the environment, and its capacity to enhance or destroy the human condition and quality of life.
G8	Propose and design a solution to a national, global or systemic problem that humans caused.
H7	Design, schedule, manage, and assess technical processes and systems.
H8	Diagnose and repair malfunctioning systems.

I5	Demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education/employment.
I6	Discover and develop talents, aptitudes, and interests related to technical pursuits.

Aerospace Engineering/Manufacturing

Goals:

A. Providing opportunities to utilize the engineering design process to overcome real world situations using age appropriate, thematically related, and hands on solutions.
B. Encouraging those habits of mind necessary to a lifelong learner, such as the ability to question, investigate, design, experiment, and evaluate.
C. Providing opportunities to develop safe and appropriate skills, and awareness of a wide range of traditional and contemporary technologies.
D. Preparing students to recognize, use, prepare (and communicate) technical information in order to engineer solutions to problems related to a variety of technological systems.
H. Providing opportunities to plan, develop, operate, control and maintain a variety of technological systems such as medical, agricultural, biological, energy and power, information and communication, transportation, manufacturing, construction, robotics and automation and emerging technologies.

Competencies and Outcomes: The student will be able to:

Grade 9-12	
A8	Design, develop, manage, and evaluate activities using identified problem-solving techniques.
B5	Demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.
B6	Evaluate the use of technology to solve issues.
C6	Exhibit the safe and proper selection, use and maintenance of technical equipment (both digital and physical), materials, and processes.
D11	Demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.
D12	Select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.
H7	Design, schedule, manage, and assess technical processes and systems.
H8	Diagnose and repair malfunctioning systems.

Detailed Course of Instruction: Students practice piloting an aircraft during an orientation flight (fixed & rotary wing) and on flight simulators. They experiment with the four forces & three axes of flight by designing and building a model aircraft. They visit two or more NH manufacturers of aerospace components and meet with professionals in the aviation industry. They explore other aerospace careers, not directly associated with engineering and manufacturing so they become aware of additional career opportunities within the aerospace career fields.

Drone/UAS Academy

Goals:

A. Providing opportunities to utilize the engineering design process to overcome real world situations using age appropriate, thematically related, and hands on solutions.

B. Encouraging those habits of mind necessary to a lifelong learner, such as the ability to question, investigate, design, experiment, and evaluate.
C. Providing opportunities to develop safe and appropriate skills, and awareness of a wide range of traditional and contemporary technologies.
D. Preparing students to recognize, use, prepare (and communicate) technical information in order to engineer solutions to problems related to a variety of technological systems.
H. Providing opportunities to plan, develop, operate, control and maintain a variety of technological systems such as medical, agricultural, biological, energy and power, information and communication, transportation, manufacturing, construction, robotics and automation and emerging technologies.
I. Encourage the development of (career awareness and) leadership abilities. Through (classroom activities and) participation in extracurricular activities such as the Technology Student Association and other Career & Technical Student Organizations, Design Challenges, and projects that support their communities.

Competencies and Outcomes: The student will be able to:

Grade 9-12	
A8	Design, develop, manage, and evaluate activities using identified problem-solving techniques.
B5	Demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.
B6	Evaluate the use of technology to solve issues.
C6	Exhibit the safe and proper selection, use and maintenance of technical equipment (both digital and physical), materials, and processes.
D11	Demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.
D12	Select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.
H7	Design, schedule, manage, and assess technical processes and systems.
H8	Diagnose and repair malfunctioning systems.
I5	Demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education/employment.
I6	Discover and develop talents, aptitudes, and interests related to technical pursuits.

Detailed Course of Instruction: Students practice piloting during an orientation flight (fixed & rotary wing) and on Drone flight simulators. They also experiment with four forces & three axes of flight, build and repair model drones and hone flying skills. They visit two or more NH manufacturers of UAS and drone equipment and meet with professionals from the drone/aviation industry. They explore other aerospace careers, not directly associated with UAS and drone use so they become aware of additional career opportunities within the aerospace career fields.

Systems Tool Kit: Orbital Mechanics

Goals:

A. Providing opportunities to utilize the engineering design process to overcome real world situations using age appropriate, thematically related, and hands on solutions.
B. Encouraging those habits of mind necessary to a lifelong learner, such as the ability to question, investigate, design, experiment, and evaluate.
C. Providing opportunities to develop safe and appropriate skills, and awareness of a wide range of traditional and contemporary technologies.
D. Preparing students to recognize, use, prepare (and communicate) technical information in order to engineer solutions to problems related to a variety of technological systems.
H. Providing opportunities to plan, develop, operate, control and maintain a variety of technological systems such as medical, agricultural, biological, energy and power, information and communication, transportation, manufacturing, construction, robotics and automation and emerging technologies.
I. Encourage the development of (career awareness and) leadership abilities. Through (classroom activities and) participation in extracurricular activities such as the Technology Student Association and other Career & Technical Student Organizations, Design Challenges, and projects that support their communities.

Competencies and Outcomes: The student will be able to:

Grade 9-12	
A8	Design, develop, manage, and evaluate activities using identified problem-solving techniques.
B5	Demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.
B6	Evaluate the use of technology to solve issues.
C6	Exhibit the safe and proper selection, use and maintenance of technical equipment (both digital and physical), materials, and processes.
D11	Demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.
D12	Select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.
H7	Design, schedule, manage, and assess technical processes and systems.
H8	Diagnose and repair malfunctioning systems.
I5	Demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education/employment.
I6	Discover and develop talents, aptitudes, and interests related to technical pursuits.

Detailed Course of Instruction: Students experience full emersion into the orbital analysis tool used by industry called Systems Tool Kit (STK). This software teaches satellite guidance navigation and control. This course is taught at a local aerospace company that hires satellite GNC operators. Students have an opportunity to continue and acquire industry certification in STK from Analytical Graphics, Inc. They explore other aerospace careers, not directly associated with the use of STK so they become aware of additional career opportunities within the aerospace career fields.

The fourth course being offered is based in the life sciences.

High Altitude Effects on the Human Body:

Goals:

A. Providing opportunities to utilize the engineering design process to overcome real world situations using age appropriate, thematically related, and hands on solutions.
B. Encouraging those habits of mind necessary to a lifelong learner, such as the ability to question, investigate, design, experiment, and evaluate.
C. Providing opportunities to develop safe and appropriate skills, and awareness of a wide range of traditional and contemporary technologies.
D. Preparing students to recognize, use, prepare (and communicate) technical information in order to engineer solutions to problems related to a variety of technological systems.
H. Providing opportunities to plan, develop, operate, control and maintain a variety of technological systems such as medical, agricultural, biological, energy and power, information and communication, transportation, manufacturing, construction, robotics and automation and emerging technologies.
I. Encourage the development of (career awareness and) leadership abilities. Through (classroom activities and) participation in extracurricular activities such as the Technology Student Association and other Career & Technical Student Organizations, Design Challenges, and projects that support their communities.

Competencies and Outcomes: The student will be able to:

Grade 9-12	
A8	Design, develop, manage, and evaluate activities using identified problem-solving techniques.
B5	Demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.
B6	Evaluate the use of technology to solve issues.
C6	Exhibit the safe and proper selection, use and maintenance of technical equipment (both digital and physical), materials, and processes.
D11	Demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.
D12	Select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.
H8	Diagnose and repair malfunctioning systems.
I5	Demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education/employment.
I6	Discover and develop talents, aptitudes, and interests related to technical pursuits.

Detailed Course of Instruction: Students research the effects of low pressure, temperature extremes and micro-gravity on various systems of the human body: Cardiovascular, Endocrine, Respiratory, and Skeletal Systems. They will complete activities to understand more about these systems and speak to fighter pilots and astronauts who have experienced pressure & temperature extremes and microgravity

effects on their own bodies. Students will investigate various technologies developed to make high altitude flight possible.

7.0 A plan for recording student progress in meeting expected student outcomes for each course of instruction [Ed 1403.01(b)(1)(c)].

A plan for formative and summative assessments is in place for each course of instruction. All formative assessments will be informal resulting from instructor observation of project-based learning and observation of student performance. A formative assessment will be done by mid-week and instruction will be adapted as appropriate to meet goals. Project evaluation rubrics will be used to evaluate program proficiencies and student performance. A sample formative assessment check sheet and a sample summative assessment form is attached at the end of this application.

8.0 A description of how the assessment of student learning outcomes will be done [Ed 1403.01(b)(1)(d)].

ACE Academies sessions are very fast paced. For formative assessments, instructors will be provided with check sheets and charts on which they can record brief notes concerning student performance of certain tasks. For summative assessments, instructors will be provided with Project Evaluation Rubrics will be used to evaluate program proficiencies and student performance. A four point scale from "Beginning" to "Exceeding," will indicate what degree of mastery the student has achieved.

9.0 The number of credits each proposed course of instruction will fulfill [Ed 1403.01(b)(1)(e)].

Students that successfully complete either the Aerospace Engineering/ Manufacturing, Drone/UAS Academy, Systems Tool Kit or High Altitude Effects on the Human Body course will be awarded a Learn Everywhere certificate for ½ credit to be applied to meeting high school graduation requirements.

10.0 A description of the competency-based grading system to be used for each proposed course of instruction [Ed 1403.01(b)(1)(e)].

Students will be evaluated on each Performance Objective listed above using the following scale:

Beginning; Approaching: Meeting: Exceeding

See the sample in the "Addition Information" section.

11.0 A description of methods for admission which shall not be designed, intended, or used to discriminate or violate individual civil rights in any manner prohibited by law [Ed 1403.01(b)(2)(a)].

ACE Academies' methods for admission have not been designed, intended, or used to discriminate or violate individual civil rights in any manner prohibited by law. Financial assistance is available for those in need of aid.

12.0 A description of how the program will liaison with the local education agency (LEA) for students with an education plan pursuant to section 504 of the Rehabilitation Act [Ed 1403.01(b)(2)(b)].

At the time of enrollment, WinnAero ACE Academy offers parents the opportunity to disclose any information regarding ongoing 504 education plan related accommodations and modifications required

for their child. With the parent's permission, WinnAero ACE Academy will contact the student's Local Education Agency (LEA) to coordinate recommended 504 accommodations and/or modifications in the WinnAero ACE Academy programs. Although WinnAero ACE Academy instructors are not explicitly certified to work with students with 504 plans, they are caring, patient and compassionate and can work with the student's LEA representative to understand how to implement recommended accommodations and/or modifications. If WinnAero ACE Academy determines it is unable to provide the required accommodations and/or modifications for a student, the parents will be informed before committing to enrolling their child in a WinnAero ACE Academy program.

13.0 A description of how the program will liaison with the LEA for a student with disabilities, consistent with the student's IEP [Ed 1403.01(b)(2)(c)].

Parents of students with IEP's have willingly shared those with us and we do everything possible to meet the accommodations outlined in the students individualized plan.

WinnAero ACE Academy gives all parents the opportunity to disclose any sorts of disabilities, including any related Individualized Education Program (IEPs). If requested, WinnAero ACE Academy will work with the parent to contact the student's Local Education Agency (LEA) to assist in the coordination of the student's IEP to include, but not be limited to, the required special education programs, support services, and least restrictive environment. At the parent's request, a WinnAero ACE Academy representative will participate in IEP team meetings that discuss revisions to the student's IEP needed to participate in an WinnAero ACE Academy program. WinnAero ACE Academy will also coordinate with the LEA in fulfilling the LEA's responsibility to provide any special education, related services, supplementary aids and services, accommodations, and modifications the IEP team has determined the student needs. The provision of these services is not the direct responsibility of the WinnAero ACE Academy.

14.0 A statement that the applicant understands that it has certain responsibilities, pursuant to Section 504 of the Rehabilitation Act, if it receives federal funds, or the Americans with Disabilities Act, as amended, to provide students with disabilities with equal access and equal opportunities to participate in the learn everywhere program, including by providing the student with reasonable accommodations [Ed 1403.01(b)(2)(d)].

WinnAero ACE Academies understands that it has certain responsibilities, pursuant to Section 504 of the Rehabilitation Act, if it receives federal funds, or the Americans with Disabilities Act, as amended, to provide students with disabilities with equal access and equal opportunities to participate in the learn everywhere program, including by providing the student with reasonable accommodations as required in Ed 1403.01(b)(2)(d).

15.0 A description of facilities to be used for educational instruction and a description of how the facilities will meet the priorities of the program [Ed 1403.01(b)(3)(a)].

All WinnAero ACE Academies sessions (with the exception of STK) are run in the Sky Riders Hangar on Airport Rd, Laconia Airport. This hangar has an area large enough to be divided with pipe and drape into four individual classrooms. An additional room off the large hangar is adequate size to allow the set-up of 10 Flight Simulators. The hangar is on the south side of the airport, off taxiway Alpha, with quick and easy access to aircraft for orientation flights. Restroom facilities are available in the hangar.

The STK session is run at Rogue Space Systems, Inc., in downtown Laconia. A computer lab will be assembled for the participants. Engineers and technicians with expertise in STK will be available for assistance as needed.

16.0 A statement affirming that the facilities shall comply with all applicable federal and state health and safety laws, rules, and regulations [Ed 1403.01(b)(3)(b)].

WinnAero ACE Academies affirms all facilities will comply with all applicable federal and state health and safety laws, rules, and regulations as required in Ed 1403.01(b)(3)(b).

17.0 Disclosure of insurance, if any, which would cover the participants in the Learn Everywhere program [Ed 1403.01(b)(4)].

WinnAero ACE Academies agrees to disclosed to Learn Everywhere program participants insurance WinnAero ACE Academies maintains, if any, which would cover the participants in the Learn Everywhere program.

Additional Information

The applicant is encouraged to include any additional information in this application that further explains their program and how it will meet the needs of students through the Learn Everywhere program.

Below is a list of our ACE Academy staff and their qualifications:

Daniel Caron: Holds an Experienced Educator: Technology & Engineering Education 1000 Certification; BS in Technology Education and MOE in Occupational Education, both from Keene State College, 44 years in education; currently teaching at Gilford HS, SAU 73; 12 years with WinnAero ACE Academy.

Jenna Reynolds: Holds a certification for 9-12 Physics Education, and 5-8 General Science; B.S. in Aeronautical Engineering from RPI, and an M.Ed in Curriculum and Instruction from NEC. 9 years in education. Currently teaching at Amherst Middle School, SAU 39; 1 year with WinnAero ACE Academy.

Robert Rotier: Holds a certification for 9-12 Physics Education, 13 years in education (retired), BS Chemical Engineering, Univ of Minnesota, 24 years chemical engineering; 9 years with WinnAero ACE Academy.

James O'Donnell: Holds a CTE endorsement 1757 for Computer Programming and a Level 1 certification for STK; B.S. and an M.S. in Architectural History from Cornell University and an MArch (professional Architecture degree) from the University of Texas, Austin; recently retired from SAU 30;

ADDITIONAL INFORMATION

Formative Assessment Check Sheet

ACE Academy Session: Effects of High Altitude on the Human Body

During a one-week session, a formative assessment should be given on Tuesday/Wednesday and instruction modified as needed. The following check sheet will be used as students are working on experiments, Design Briefs, and Projects.

Student Name	Uses Engineering Process	Developing Habits of Mind	Skills & Awareness	Use Tech Info	Plan, Develop, Operate, Maintain	Leadership

NHTEA Engineering and Technology Goals

J. Providing opportunities to utilize the engineering design process to overcome real world situations using age appropriate, thematically related, and hands on solutions.
K. Encouraging those habits of mind necessary to a lifelong learner, such as the ability to question, investigate, design, experiment, and evaluate.
L. Providing opportunities to develop safe and appropriate skills, and awareness of a wide range of traditional and contemporary technologies.
M. Preparing students to recognize, use, prepare (and communicate) technical information in order to engineer solutions to problems related to a variety of technological systems.
H. Providing opportunities to plan, develop, operate, control and maintain a variety of technological systems such as medical, agricultural, biological, energy and power, information and communication, transportation, manufacturing, construction, robotics and automation and emerging technologies.
I. Encourage the development of (career awareness and) leadership abilities. Through (classroom activities and) participation in extracurricular activities such as the Technology Student Association and other Career & Technical Student Organizations, Design Challenges, and projects that support their communities.

Summative Assessment Competency Rubric

ACE Academy Session: <u>High Altitude Effects on the Human Body</u>

A8 Design, develop, manage, and evaluate activities using identified problem-solving techniques.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to design, develop, manage, and	Learner *uses support* to design, develop, manage, and evaluate	Learner *consistently and independently* designs, develops,	Learner *consistently and independently* analyzes designs and

evaluate activities using identified problem-solving techniques.	activities using identified problem-solving techniques.	manages, and evaluates activities using identified problem-solving techniques.	evaluates development & management plans as well as evaluating activities using identified problem-solving techniques.
Still Learning…	Sometimes…	Always…	Always independently…
• I can use identified problem-solving techniques to design solutions to technical problems. • I can use identified problem-solving techniques to develop solutions to technical problems. • I can use identified problem-solving techniques to manage solutions to technical problems. • I can use identified problem-solving techniques to evaluate solutions to technical problems.			

B5 Demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.	Learner *uses support* to demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.	Learner *consistently and independently* demonstrates an understanding of and an appreciation for the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.	Learner *consistently and independently* analyses the importance of accepting individual responsibility, developing a solid work ethic and learning to plan and work effectively.
Still Learning…	Sometimes…	Always…	Always independently…
• I can demonstrate an understanding of and an appreciation for the importance of accepting individual responsibility. • I can demonstrate an understanding of and an appreciation for the importance of developing a solid work ethic. • I can demonstrate an understanding of and an appreciation for the importance of learning to plan and work effectively.			

B6 Evaluate the use of technology to solve issues.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to evaluate the use of technology to solve issues.	Learner *uses support* to evaluate the use of technology to solve issues.	Learner *consistently and independently* evaluates the use of technology to solve issues.	Learner *consistently and independently* evaluates and analyzes the use of technology to solve issues.
Still Learning…	Sometimes…	Always…	Always independently…
• I can evaluate the use of technology to solve issues.			

C6 Exhibit the safe and proper selection, use and maintenance of technical equipment (both digital and physical), materials, and processes.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to safely and properly select, use and maintain technical equipment (both digital and physical), materials, and processes.	Learner *uses support* to safely and properly select, use and maintain technical equipment (both digital and physical), materials, and processes.	Learner *consistently and independently* safely and properly selects, uses and maintains technical equipment (both digital and physical), materials, and processes.	Learner *consistently and independently* analyses safety and proper selection, use and maintenance of technical equipment (both digital and physical), materials, and processes.
Still Learning…	Sometimes…	Always…	Always independently…
• I can safely and properly select, use and maintain technical equipment (both digital and physical). • I can safely and properly select, use and maintain technical materials. • I can safely and properly select, use and maintain technical processes.			

D11 Demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.	Learner *uses support* to demonstrate those technical skills needed to find, organize, use and communicate information effectively in a technological world.	Learner *consistently and independently* demonstrates those technical skills needed to find, organize, use and communicate information effectively in a technological world.	Learner *consistently and independently* demonstrates and evaluates those technical skills needed to find, organize, use and communicate information effectively in a technological world.
Still Learning…	Sometimes…	Always…	Always independently…
• I can demonstrate those technical skills needed to effectively find information in a technological world. • I can demonstrate those technical skills needed to effectively organize information in a technological world. • I can demonstrate those technical skills needed to effectively use information in a technological world. • I can demonstrate those technical skills needed to effectively communicate information in a technological world.			

D12 Select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.			
Beginning	Developing	Proficient	Exceeds

Learner *requires support* to select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.	Learner *uses support* to select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.	Learner *consistently and independently* select and use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.	Learner *consistently and independently* selects and evaluates the use of appropriate measuring tools to accurately gather, compile, analyze, and communicate information.
Still Learning…	Sometimes…	Always…	Always independently…
• I can select appropriate measuring tools to accurately gather, compile, analyze, and communicate information. • I can use appropriate measuring tools to accurately gather, compile, analyze, and communicate information.			

D12 Design, schedule, manage, and assess technical processes and systems.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to design, schedule, manage, and assess technical processes and systems.	Learner *uses support* to design, schedule, manage, and assess technical processes and systems.	Learner *consistently and independently* designs, schedules, manages, and assesses technical processes and systems.	Learner *consistently and independently* evaluates designs, schedules, management techniques, and assesses technical processes and systems.
Still Learning…	Sometimes…	Always…	Always independently…
• I can design technical processes and systems. • I can schedule technical processes and systems. • I can manage technical processes and systems. • I can assess technical processes and systems.			

H8 Diagnose and repair malfunctioning systems.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to diagnose and repair malfunctioning systems.	Learner *uses support* to diagnose and repair malfunctioning systems.	Learner *consistently and independently* diagnoses and repairs malfunctioning systems.	Learner *consistently and independently* analyzes the function of an apparatus to diagnose and repair malfunctioning systems.
Still Learning…	Sometimes…	Always…	Always independently…
• I can diagnose malfunctioning systems. • I can repair malfunctioning systems.			

I5 Demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education/employment.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education and employment.	Learner *uses support* to demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education and employment.	Learner *consistently and independently* demonstrates an awareness of career opportunities and requirements needed to make informed and meaningful choices in their education and employment.	Learner *consistently and independently* demonstrates an awareness of career opportunities and evaluates the requirements needed to make informed and meaningful choices in their education and employment.
Still Learning…	Sometimes…	Always…	Always independently…
• I can demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in my education. • I can demonstrate an awareness of career opportunities and requirements needed to make informed and meaningful choices in my employment.			

I6 Discover and develop talents, aptitudes, and interests related to technical pursuits.			
Beginning	Developing	Proficient	Exceeds
Learner *requires support* to discover and develop talents, aptitudes, and interests related to technical pursuits.	Learner *uses support* to discover and develop talents, aptitudes, and interests related to technical pursuits.	Learner *consistently and independently* discovers and develops talents, aptitudes, and interests related to technical pursuits.	Learner *consistently and independently* evaluates talents, aptitudes, and interests related to technical pursuits during the discovery and development process.
Still Learning…	Sometimes…	Always…	Always independently…
• I can discover talents, aptitudes, and interests related to technical pursuits. • I can develop talents, aptitudes, and interests related to technical pursuits.			